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CLINICAL LECTURE.

ACUTE PNEUMONIA—TUBERCULOSIS.*

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(Reported by William Whitford, M.D.)

Pneumonia.

Gentlemen:—Last Friday morning, among other cases, I directed your attention to a young man who came in the night before. I had not seen him enough to make a critical examination of his case. He was reported to have been seriously sick before he came to the hospital, and at the time of admission he had all the symptoms of an active grade of malarial fever. His temperature was high; his skin more or less dry, and of a sallow hue, such as is more frequently seen in malarious fevers. His pulse, though soft and lacking force, was quick and of fairly good volume; his mind was wandering. Every now and then he would drop into a drowsy condition, then suddenly awake with spasmodic force and excitement. He was very tall, but not proportionately developed; and the only history we could obtain from him was that he had been engaged with a Wild West Show which had been traveling for some months through Northern Indiana and other sections of the country up to the time he was taken sick. Examining his chest a minute or so before the commencement of our usual Friday morning remarks, and getting from him this short history, I was led to think for a moment that he was probably suffering a

severe attack of typho-malarial fever. He had been exposed to malarious influences, had led an irregular life, subject more or less to excitement, variations, ups and downs, in his daily avocation. In going over his chest I failed to detect any evidences of structural or organic disease of the heart. His bowels had a tendency to looseness, requiring one or two doses of turpentine emulsion to restrain them. The character of his pulse, the discharges from his bowels, the rapid breathing, together with the excited, spasmodic arousing from a lethargic condition, led me to infer also that he might have had an inflammatory condition of the membranes of the brain in connection with his febrile condition. But while I was addressing you we heard him cough, and he brought up some characteristic pneumonic expectoration, which immediately led to a more extended examination of his chest; and it was found he had pneumonia involving nearly the whole right lung, with considerable dulness. The sound that was heard belonged to the second stage of the disease; it was not a crepitant râle, but a coarse, mucous rhonchus, with dulness throughout the right side of the chest, and to some extent on the left. The patient was put upon the muriate of ammonia mixture, and a fair, but not extravagant use of quinine, relying upon the muriate of ammonia as an expectorant, and the quinine for its known efficacy in certain grades of pneumonia to help to sustain the tone of the pulmonary vessels and to lessen the amount of exudation and extravasation going on. After having swathed his chest with poultices, it required two or three persons to keep him in bed; he struggled and fought most of the time. In addition to the other remedies we directed carbonate of ammonia; and here we experienced the same trouble as in the application of the poultices. His mental wandering, excitement, and pug-

* Delivered at the bedside in the Mercy Hospital, Chicago, Illinois.

nacious disposition to resist everything given him, rendered it exceedingly difficult to administer medicine or nourishment regularly. The patient died in about forty-eight hours from the time of admission, as I had supposed he would at the time I first saw him.

A *post mortem* examination was made. It was found that nearly the entire right lung was in a complete state of hepatization; a considerable portion of the lower and posterior part of the left was in a similar condition. The upper and anterior portion of the left lung—the part where I put my ear to listen to the cardiac sounds to see whether or not I could detect any structural or organic diseases of the heart—was the only portion of his lungs that remained and was capable of carrying on respiration. There was no disease found effecting the heart. The liver was considerably enlarged, doubtless from the secretion, much the same as it is apt to be found in connection with protracted remittent and malarious fevers, with some fatty degeneration. The spleen, however, was not much enlarged—a feature of interest, inasmuch as it tends to partly overthrow the idea of the existence of typhoid. In following out the examination, there was an intense inflammatory congestion in the coats of the intestines along the lower part of the ileum and junction with the colon. The inflammatory engorgement of the intestines was sufficient to account for the diarrhoeal discharges he had, and in laying them open no characteristic enlargement of Peyer's patches could be found; in fact, the usual accompaniment of typhoid did not exist either in the glands of the interior of the intestines, the mesentery or spleen; but there was simply an inflammation of a portion of the intestines together with the conditions we have already pointed out. Almost all portions of the kidneys were studded with hydatid cysts, varying in size, and filled with a yellow serous fluid which bore a close resemblance to urine. There were also some cicatrices on the surface of the kidneys, giving the appearance as though there might have been cysts near the surface, which at some time or other had broken and finally collapsed. The number of cysts pervading both kidneys was quite unusual. The *post mortem* examination in this case revealed a condition of considerable interest to us, taken in connection with the pneumonia, the persistent mental delirium, the general run of fever, and the fatal result. It is undoubtedly true that the patient had contracted strong malarious influences, disposing to the development of fever; and the febrile condition supervening, with its effects upon the general

secretory action, rendered the kidneys incapable of carrying on the requisite amount of elimination. The pneumonia probably commenced during the second week of the progress of the attack, and a day or so before he came to the hospital. The improper and inadequate elimination of urea doubtless left elements in his blood which kept up the cerebral excitement to which we have previously alluded—a condition which at any time during the last few days of his life might have brought on uræmic convulsions, followed by coma and death.

NOT Tuberculosis.

This patient's trouble came on about four years ago: at that time he was attacked with hemorrhage, or spitting of blood. The expectoration he raised then, we are informed, was not mixed with mucus; it was a pure, characteristic hemorrhage, such as we see in cases of hæmoptysis or coughing of blood from the lungs. Whatever cough he had at that time passed away in a measure, although he tells us he had more or less of a mild cough all last summer. As we look at him, we observe his general nutrition is below par; he looks weak, pale and emaciated. About a week ago he was attacked with hemorrhage, and brought up, as near as can be ascertained, a half pint of blood; and since that time he has had a continued harassing cough.

He feels pain in the left side of his chest, and, when he coughs, the phlegm he raises is tinged or slightly streaked with blood. When I commenced to examine him, I found his chest enveloped closely with wet cloths, so on that account I did not feel disposed to expose him and subject him to a thorough and protracted examination; perhaps I should have done so. However, I went over his chest enough to convince me that there was something else back of the hemorrhage. You will notice a flattening beneath the clavicle, and that neither side of his chest is filled out. The respiratory sounds are prolonged, exaggerated, and rough on both sides, but a little more so on the left; there is an increased fremitus of voice heard during physical exploration. The history of the case, the characteristic flattening in the infra-clavicular region, and the strong fremitus of voice on this (the left) side—not cavernous, but a strong bronchophony—leaves the way perfectly clear for the inference that this man has got a regular case of slow tuberculosis, the miliary tubercular deposit having commenced there, in all probability, four or five years ago, gradually increasing and invading the lungs little by lit-

tle, tending, during the progress of the disease, to block some of the vessels, giving rise to the hemorrhage to which he referred.

During the progress of the second stage of tuberculosis, the miliary tubercular deposits are undergoing a process of softening, and the surrounding lung tissue is more or less filled by a low grade of pneumonic engorgement, and sometimes a sub-mucous râle may be developed, which is not removed temporarily by the act of coughing, but is developed regularly near the end of each moderate attempt at inspiration, indicating that it depends upon the ingress of air into textures which are more or less filled with a glutinous or viscid fluid. By and by, as the tubercular process continues, the area of congestion in the vessels becomes greater. The mere loss of a half pint of blood amounts to very little; the patient can make up that in a week with a fair appetite and digestion. But it is nevertheless important inasmuch as it points indubitably to obstruction in the pulmonary tissue, and that obstruction, added to the other symptoms, shows very clearly that it is due to a tubercular deposit—a deposit that has not as yet undergone the process of softening; consequently if this patient could go to a milder, more congenial climate, his chances for ultimate recovery would be far greater than they are at present. I have no doubt the miliary tubercular deposit is in a crude state at present, and while there may have been little or no extravasation into the pulmonary tissues, there is danger that it will degenerate and set up a regular suppurative process in about three, four, or six weeks, and while he may not feel sick, be able to dress himself and perhaps walk about the wards some, yet he will continue to cough and expectorate considerable purulent matter, and on the whole getting weaker and more emaciated, and in about six weeks more we will begin to get a cavernous sound at some point of the upper part of the involved (left) lung—in other words, our patient will be in a condition favorable for the commencement of the second stage of tuberculosis disease. By the second stage I mean the stage of softening, disintegration or degeneration of the tubercular masses and the establishment of regular suppurative processes, causing more cough, a quickening of the pulse, probably hectic fever, more night sweats, and soreness in the chest at certain times. When the suppurative process of the disease has about completed itself, the third stage may be said to commence; and during that stage we would probably have an excavation of one or more tuberculous cavities, and a characteristic hectic fever.

In the first stage the miliary tubercular deposit or deposits, as the case may be, are in a crude, unchanged condition; they may exist in a latent state for years—indeed many cases go on for several years without passing beyond that stage. Inspection at this time will usually show a noticeable degree of flattening in the infra-clavicular region, or, as I have informed you on previous occasions, a lessening of the antero-posterior diameter of the upper part of the chest. In case the tubercular deposit is present, or exists only in one lung, the difference between the affected side and that of the other is well marked. If you carefully percuss the chest, so as to get the tone of sound clearly and unmistakably, you will detect a perceptible diminution in the resonance of the affected side, in the infra-clavicular space. In the first stage the physical signs are not merely a production of new sounds, but simply an alteration of the natural respiratory murmur, increased fremitus of voice and diminished resonance on percussion.

The existence of tuberculosis is not always proven by the physical signs alone; they simply prove the existence of something which diminishes the amount of air in the lung, which we examine, and thus renders its structure more dense.

Auscultation in the second stage gives alterations in the respiratory murmur. We notice an irregularity in the development of the inspiratory sound, or its renewal in expiration, and usually there are added more or less mucus râles. The râles at first will be moveable, brought about by mucus accumulations in the bronchial tubes and the passage of air to and fro through it.

The treatment for such a patient as this is first, a change of climate, where he can breathe soft, mild, genial, invigorating air, with good hygienic surroundings, instead of being exposed to a rough, harsh, cold, damp climate, with gaseous, noxious vapors, frozen ground, snow, etc., such as we get in Chicago—a climate where the air is bracing and soothing instead of irritating to the air passages. Were such patients to take up their residence in a good, favorable climate, the disease would not, in a great many instances, extend beyond the first stage, and they would live and enjoy life to a reasonable old age, and attend to business all the while. While in some instances medication will fail, in others it will do good. Medicine is exceedingly useful during the inflammatory attacks; you can fight the disease oftentimes so as to curtail the inflammatory process for a

good while, even without the patient going to another climate. This is partly the reason why many individuals are so reluctant to get into a more favorable country, where the air is bracing, wholesome and soothing. A very large majority of such patients do not comprehend the importance and danger of the situation; they may tell you they do not feel very sick, and on that account it is hard for them to believe that there is anything serious taking place until the second stage is ushered in and fully established, then they begin to have decided night sweats, associated with a rapid loss of flesh, shortness of breath, and commence to think their disease is assuming a serious aspect. The great object in all such cases is to study the initial or primary stage of this tubercular form of disease. I verily believe that this patient commenced to have these miliary tubercular formations or deposits four or five years ago.

Further treatment would consist in giving him such anodyne expectorants as will efficiently allay the irritation, lessen the temporary congestion or inflammatory action as well as possible, for semi-pneumonic processes have undoubtedly been set up around the point where the hemorrhage originated. We put him upon the muriate of ammonia mixture, once every four hours, together with the carbolic acid and iodine mixture alternately every six hours. As an alternative for aiding the muriate of ammonia, counteracting the deteriorative changes in the lungs, lessening further tendency to hemorrhages, I suggest that he be given a pill (three grains of ergotinine) twice a day, one after breakfast, and one about eight o'clock in the evening.

[In combating the inflammatory attacks, lessening the cough, rendering the expectoration easy, promoting rest at night, and yet producing very little impairment of appetite or digestion, Dr. Davis recommends also a combination of the muriate of ammonia, tartrate of antimony and potassium, and sulphate of morphia, dissolved in the syrup of liquorice in such proportions that four cubic centimeters or one teaspoonful would contain four decigrams (gr. vi) of the first, 4 milligrams (gr. $\frac{1}{16}$) of the second, and 5 milligrams (gr. $\frac{1}{32}$) of the third, to be taken every four or six hours, according to the severity of the symptoms.]

—There is a hospital for women at Tashkend, in Turkestan, established by some Russian ladies. It was started some years ago, and the native female population take advantage of it in increasing numbers.

COMMUNICATIONS.

THE TECHNIQUE OF OOPHORECTOMY.*

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Although so much has been written on the subject of oöphorectomy that it seems hardly possible to add anything new to our present knowledge on the subject, yet success depends so much on the manner and the details of operating, that it is not perhaps a waste of time to call attention to those methods which have received the stamp of approval of the surgeons who have thus far had the best results in abdominal surgery. The methods detailed below are the common property of the medical profession, evolved by the experience of many operators. Some the author first saw used in England and in Germany, others are the result of American ingenuity, and all are of great importance in the production of good results after operating. If to any one man belongs a larger share of credit than to the rest in popularizing these methods in this section of the country, certainly Dr. Howard A. Kelly, of Philadelphia, deserves it.

Preparation of the Patient.—Let us first consider the preparation of the patient. In all cases it is advisable for the operator to have his patient under observation some little time before the operation. This has the double advantage of giving the operator and the patient time to become acquainted with each other, and for the patient to acquire confidence in the operator, and gives the surgeon opportunity to study carefully the case. Too much condemnation cannot be given to hasty and ill-considered operations. The urine should be carefully examined, in order to see that it is free from albumin. Neglect of this rule has doubtless oftentimes been the cause of the patient's death. The gastro-intestinal canal should be in state of healthy function, and the day preceding the operation all portions of the intestine should be thoroughly emptied. This is best secured by the administration of some gentle laxative, such as the compound liquorice powder, in one or two drachm doses; or, if there be some torpidity of the liver, by the administration of one-twelfth of a grain of calomel every hour until the bowels are opened; care, however, being

* Read before the Philadelphia County Medical Society, December 28, 1887.

taken in both cases not to purge the patient, and not to set up any excessive peristalsis. On the morning of the operation, the rectum should be emptied by an enema, and in order to prevent the accumulation of gas in the intestines, and to avoid gaseous distention of the intestines, it is generally best to put into the laxative enema administered a little turpentine emulsified with the white of an egg. This, as a rule, relieves the intestines of any accumulation of gas present in them, and at the same time is not irritating.

The patient should have, on the morning of the operation, a hot bath, which will add to her comfort and remove any sebaceous matter on her abdomen; it is best to have the patient sponged with alcohol after the bath. Also, on the morning of the operation, the patient should abstain from taking any food, unless it be a cup of strong coffee or a little milk and lime-water. The administration of this food should always precede the time of operation by three or four hours. Above all, it is necessary that the patient have a chance to recuperate her strength and prepare for the mental and physical ordeal of the operation by having a rest in bed of at least three days before the operation, and this is especially important if the patient has come on a long journey and is fatigued with traveling.

The Surroundings of the Patient.—By election, it is always best to operate upon the patient in a hospital, particularly if one have a hospital ward especially devoted to this class of work, in preference to operating upon the patient at her own home. The reasons for this are obvious. In the hospital there are trained assistants and trained nurses, and if the operator be busy with this kind of work, the nurses have no other cases to manage, and are especially trained and especially adapted to this work. Again, too, in the hospital the operator always has his own assistants, who are accustomed to his methods, who understand his wants, and who know exactly what to do at the right moment. In the hospital the operator, as a rule, has an assistant whose especial duty it is to administer the anæsthetic, and where there is an anæsthetizer properly trained for his work and competent, the operator's mind is entirely relieved of the responsibility of the administration of the anæsthetic. He does not have to look at the patient to see how she is doing under the influence of the anæsthetic; he does not have to be interrupted in his work by the patient getting too much ether or chloroform, nor is he bothered

with rigidity and stiffening of the abdominal parietes because the patient is not sufficiently under the influence of the anæsthetic.

At the patient's home, especially if it be far distant from the home of the operator, it is not always possible to have either good nurses or good assistants, and the lack of these contributes largely to the difference in the mortality rate in operations done at the patient's home and those done in hospitals especially adapted to this work. Again, in the hospital the operator has time to investigate thoroughly the patient's case, and to weigh all the points *pro* and *con*, whereas at the patient's home he is often obliged to operate hastily, and with a diagnosis formed after a hasty inspection of the patient and study of her case, which is oftentimes not confirmatory of the diagnosis of the regular medical attendant. Prior to the operation, it is better that the patient should have a room remote from the operating-room, with all its appalling armamentarium and paraphernalia, in order that she may not become frightened or worried by seeing the preparations for the operation. It is best on the morning of the operation to bring the patient to a room adjacent to the operating-room, where she may rest until the anæsthetic is administered. The room should be bright, cheerful, airy, and spacious, and should have pictures on the walls, or something in the room to divert the patient's attention. The patient should also be constantly attended by a nurse during the hours preceding the operation, in order that she may not become lonely and allow her mind to dwell upon the operation. It is best, both before and after the operation, to exclude rigorously the friends and relatives from access to the patient, and to have the patient give herself up entirely to the operator, in order that he may control her movements without the interference of relatives or friends.

The Operation.—The room for the operation should, when possible, have walls and floors which can be thoroughly cleaned and disinfected, in order that the operation may be conducted in an aseptic atmosphere. For this purpose, the author's own operating-room has tile floors and glazed tile walls, so that the whole place can be flooded out with water, and placed in a thoroughly clean condition. An operating-table of plain wood, painted, resembling in size and shape the ordinary kitchen table, is all that is really necessary. One or two stands of light construction, and upon large castors, in order that they may be readily wheeled from one portion of the room to another, and a chair

for the assistant who holds the patient's limbs, are all the furniture required. A large can containing distilled water, and an alcohol lamp or gas burner under it, so as to maintain the heat of the water at a fixed temperature, and a tube running from the can to the table, so that at any time during the operation the whole operative field can be flooded, is also in the room. The sponges are used over and over again, until the sponge fibre commences to show evidences of disintegration. These are always of the finest quality, and for the most part those which are known as potter's sponges, or thin, flat sponges. For the first time, they are prepared as follows:

All of the dust is first beaten out of them. They are then immersed in a fifteen per cent. solution of hydrochloric acid for forty-eight hours. They are next thoroughly washed until all the acid is removed from their interstices. Then they are placed for half an hour in a solution of permanganate of potassium, 180 grains to five pints of water. This is done in order to bleach them. The hydrochloric acid solution is, of course, for the purpose of removing any mineral matter that may be in their meshes. They are again washed in running water, and placed in a solution consisting of ten ounces of the hyposulphite of sodium, five ounces of hydrochloric acid, and sixty-eight ounces of water. They are allowed to remain in this solution for a period of from two to four hours, until thoroughly bleached. They are next thrown into troughs of running water, where they are allowed to remain for several hours. Afterward they are placed in jars containing solution of bichloride of mercury (1-1000), and hermetically sealed until the time of operation. After an operation, they are washed out in warm water, then soaked in a solution of sodium carbonate, half ounce to a pint of water, for three or four hours, then rewashed in warm water and put back in the 1-1000 bichloride solution, ready for use again. The instruments are all nickel-plated, with the exception of the cutting edges. They are prepared by being first scrubbed with glycerine soap, and then immersed for several minutes in boiling hot water. They are then laid upon towels which have previously been immersed in the solution of the bichloride of mercury (1-1000), and thoroughly dried by superheated steam. They are then ready for use. The needles are kept in a five per cent. solution of carbolic oil. The ligatures and sutures are kept immersed in a solution of bichloride of mercury (1-500); they are always washed in distilled water immediately before being used.

For suturing the abdominal wall, silk-worm-gut has been found most satisfactory, clamped and held in position by perforated shot. For ligatures, the twisted Chinese silk has been found to be the best. For anaesthesia, chloroform has been used instead of ether, unless the operation is likely to prove a long one. The reason that chloroform is preferred to ether is the author's belief that chloroform, when properly and carefully administered, is nearly as safe as ether, and because with chloroform, as a rule, there is none of the bronchorrhœa and gastric disturbance which usually follow the administration of ether. Where ether is given, it is found that a less amount is required, and that the anaesthesia is more satisfactorily induced and maintained by administering the ether upon the Allis inhaler rather than with the ordinary cone. Where chloroform is employed, it is usually administered by means of the shield devised by Professor Billroth and used in his clinic.

The temperature of the operating-room should be about 75°. It is best to cover all portions of the patient's body with light blankets, with the exception of that portion of the abdomen involved in the seat of operation. An assistant sits at the foot of the operating-table, and receives and holds the patient's limbs, passes the catheter just before the operation, and, when necessary, with the finger in the vagina, lifts ovary, tube, or pedicle up into the abdominal wound, as the operator may desire. A trusted assistant takes charge of the anaesthetic, and does nothing else. The chief assistant stands on the left side of the patient, ready to give immediate aid to the operator.

Immediately preceding the operation, the patient's abdomen is wiped off with a little ether, in order to remove any greasy matter that may be present upon the abdominal wall, and it is then washed with the bichloride solution (1-1000), and carefully dried, especial care being taken to see that all the little folds about the umbilicus are perfectly clean. If there be an abundance of suprapubic hair, sufficient is removed to give a chance for extending the incision downward if necessary. The operator having satisfied himself that the patient is sufficiently anaesthetized—and by sufficient is meant that she is anaesthetized to the surgical degree—the abdomen is opened with a few rapid strokes of the knife, without the use of the director.

The operator can readily judge of the depth of the abdominal wall, and really no care is required until the subperitoneal fat is reached. The abdomen is opened in the median line,

care being taken to strike the linea alba, if possible, so as not to open the sheath of the recti muscles. If we fail to strike the linea alba, no time is lost in dissection in order to reach it; but if we miss it, the abdomen is opened, if need be, through the rectus muscle. The rule with reference to the incision best to be followed is to make it as small as compatible with the removal of the ovary or of the growth. Where oöphorectomy is performed, an incision one and one-half or two inches in length is amply sufficient. On the contrary, where an ovarian cystoma is to be removed, and the tumor is a large one, or, perchance, semi-solid, or where the adhesions are numerous, it is a great deal better to enlarge the incision in order that the growth can be readily gotten at, rather than to attempt its removal without knowing exactly what we are doing, and without having room enough to raise it up through the abdominal wound. No care is taken to prevent the blood from the wound in the abdominal wall escaping into the peritoneal cavity, and although it is always best to avoid allowing the contents of a cyst getting into the abdominal cavity, it is thought best to complete the operation rapidly, rather than to avoid the escape of the cyst contents into the abdominal cavity. If, however, we are dealing with a pus tube, then, of course, the greatest care must be used to avoid the escape of the pus into the peritoneal cavity, owing to rupture of the tube wall. The pedicle is transfixed with an aneurism needle, the penetrating arm of which is at right angles to the handle, and tied with stout, twisted Chinese silk. The loop of the ligature carried through the pedicle is held as the needle is withdrawn, and divided; each half of the pedicle is tied, and then the whole pedicle is tied with the remaining parts of one of the ligatures. The pedicle is severed close to the ligature, care being taken, however, to leave sufficient of the pedicle to prevent the ligature from slipping. An important precaution to take, to avoid secondary hemorrhage, is to hold the pedicle with the Martin forceps for a few moments and then, if there be no evidence of hemorrhage, it is dropped back into the peritoneal cavity. Where there is any tendency to hemorrhage from the pedicle, it is lightly touched with the flat button of the Paquelin cautery. Where the ovary is bound down by adhesions, and there is oozing from those which have been torn asunder, they are lightly touched with the finger, which has been rubbed against a piece of the perchloride of iron. The abdominal cavity is then invari-

ably flooded for about five minutes with a stream of distilled water at a temperature of 100° F. It is surprising to see how, when a patient is profoundly shocked, this intraperitoneal irrigation with hot water will immediately restore the equilibrium of the pulse and rally the patient from the shock. In operating, care should always be taken not to handle the ovary or the meso-salpinx any more than is absolutely necessary, because, as has been frequently noted, the patient's respiration becomes embarrassed, and oftentimes temporarily ceases during the time that the ovary is in the grasp of the operator's fingers. Where there is a cyst of any size, its contents are aspirated with Mears's trocar; but where the cyst is small, we prefer to enlarge the abdominal wound, rather than to delay the operation by evacuating the contents of the cyst with the aspirator.

The Toilet of the Peritoneum.—First, as noted above, the peritoneal cavity is thoroughly irrigated with distilled water at a temperature of 100° F. The patient is then turned on her side and all the water allowed to drain out that will. She is then again turned upon the back and the peritoneal cavity carefully sponged, the intestines and mesentery being held out of the way with one hand, while with the other the operator carries the sponge attached to a bayoneted sponge-holder, first into the retro-vaginal portion of the peritoneal cavity and then into both iliac fossæ. The sponging is continued until all shreds of coagulated blood are removed, and, until when the sponge is brought up, only a pale pinkish fluid escapes when the sponge is squeezed.

When we are sure that all hemorrhage has ceased within the peritoneal cavity, the intestines, if any have been left out of the abdominal cavity, are carefully replaced and the mesentery is folded over them. If it be necessary to lift loops of intestines out of the abdominal cavity, they should be carefully wrapped in soft towels kept moist and at a temperature of 100° F. Upon the mesentery is placed a thin, flat potter's sponge which extends half an inch or more around all portions of the wound. This is placed there in order to absorb any blood which may escape from the needle punctures. Its centre is grasped by a hæmostatic forceps in order to facilitate its removal after the sutures have all been introduced. A strong, stout needle threaded with a loop of catgut or Chinese silk, in order to snare the silkworm-gut, is used in the introduction of the sutures. The sutures are all introduced from within outward in order to avoid wounding the intestines with the point

of the needle, and the free ends of each suture are held in the bight of the hæmostatic forceps. When the sutures are all introduced, the flat sponge is removed and the central suture is first tightened. It is found that, as a rule, this makes a neater approximation of the edges of the wound. The sutures are fastened with perforated shot. The abdomen is carefully washed off with the solution of the bichloride of mercury (1-1000) immediately the wound is closed. There is then poured over the surface of the wound a liberal quantity of Keith's dressing (twelve per cent. solution of carbolic acid in glycerine). Over this are laid five or six thicknesses of Lister's gauze, and over the first thickness of the Lister's gauze (the one nearest the wound surface) is dusted a liberal quantity of pulverized iodoform or equal portions of iodoform and boracic acid. Over the Lister's gauze is then placed a thick wad of bichloride wool—that is, wool that has been wet with a solution of bichloride of mercury (1-1000) and thoroughly dried. Over this dressing is applied a bandage of opera flannel fastened with safety pins.

After-treatment.—For the first twelve hours after operation, the patient eats absolutely nothing. If, at the end of that time, the patient has rallied from her shock, and there is no hyperpyrexia or other symptoms of evil import, we commence to feed her with weak tea, ice-cold, giving two or three drachms every hour. This we have found by experience to be the best way of quenching thirst and furnishing gentle stimulation without overtaxing the stomach or producing nausea or emesis. At the end of twenty-four hours we commence the administration of food. This is preferably milk, if the patient will take it and the stomach retain it. If the stomach be irritable, we give koumiss or matzoon in place of milk. Unless the stomach rebel, the use of the milk is continued in half ounce doses with a little lime water, and after a few hours it is alternated with beef or chicken tea; on the fourth day, if the patient is doing well, we commence the administration of animal broths and soft food.

The dressing is never changed unless symptoms arise leading us to suppose there is something wrong with the wound, or trouble within the peritoneal cavity. The sutures are removed on the seventh or eighth day. Drainage is never employed, unless we have reason to fear tissue necrosis as the result of traumatism of the operation, or unless we fear hemorrhage into the peritoneal cavity. If symptoms arise which indicate drainage, it is a very easy thing to open the lower

angle of the wound, and insert a drainage tube; where a drainage tube is used, glass is the preferable form. Great care must be taken to see that the mouth of the tube is thoroughly closed by a little tuft of the bichloride wool. When it is necessary to remove any fluid contained in the drainage tube, it is best done with the long uterine syringe, and after the removal of any fluid it is well to pour along the sides of the drainage tube a few drops of Keith's solution of carbolic acid and glycerine. As a rule, the patient is kept in the hospital for a week after the sutures are removed, and is enjoined from traveling any distance until a month has elapsed from the date of the operation. The bowels are moved, as a rule, upon the sixth day, preferably by a gentle saline. Recently we have found Rubinat water the best for this purpose, giving a third of a tumblerful as a dose.

Great care should be taken by the operator to know exactly how many hæmostatic forceps, instruments, and sponges are present in the room prior to the operation. It is the duty of the nurse to count over the instruments and have the count verified by an assistant both before and after the operation in order that the operator may avoid the distressing accident which has happened now many times, of leaving a hæmostatic forceps or sponge within the abdominal cavity.

The operation may be performed at any time, with the exception of the menstrual period, and five days before and five days after it.

Complications arising in the after-treatment.—A majority of the cases that die after oöphorectomy perish from sepsis. Where proper care is taken in the preparation and management of the operation to have everything about the patient, including the atmosphere of the operating-room, the patient's body and clothing, the instruments, the dressings, and, above all, the conduct of the operation in aseptic condition, experience has shown that an extremely small per cent. of patients die from this cause. Careful attention to the rules described in this paper will do a great deal to prevent trouble of a septic nature after the operation. Cleanliness is the desideratum, and this is not by any means attained by the use of antiseptic agents. Indeed, the best results have been obtained, not with the use of carbolic acid or corrosive sublimate, but by the use of distilled or plain boiled water. Personally, I take it that the use of carbolic acid is never justifiable, for it can never be used in solutions sufficiently strong to possess aseptic properties without

subjecting the patient to the danger of carbolic acid poisoning. Where, however, septicæmia does present itself it is best combated by reopening the abdominal wound and irrigating the peritoneal cavity with hot water. The septic hyperpyrexia is best reduced by the administration of antipyrin, and when once the temperature is gotten within the safety line it is best kept there by the administration of quinia. In desperate cases good results in the reduction of high temperature may be hoped for from the ice cap. Stimulants must be freely given, and opium or chloral in sufficient doses to control the nervous disturbance which is nearly always present. Where it is necessary to give opium or chloral it is best to give by the rectum, saving the stomach for the administration of food and stimulus.

Peritonitis following the operation is, I believe, generally septic in character; it is best subjugated by the use of salines. Shock after the operation requires the same plan of treatment employed in treating shock after any other operation. The usual means employed are, external warmth and the hypodermic administration of cardiac stimulants, as soon as the patient can swallow a few spoonfuls of hot coffee, will generally be found the best means to counteract the shock.

The Limitations of the Operation.—As this subject was the one which I had purposed bringing before the attention of the society for discussion to-night, permit me to give you the conclusions I have come to in the matter. I believe the operation is justifiable for the relief of ovarian pain, otherwise uncontrollable; for the artificial establishment of the menopause in cases of uterine fibroma characterized by rapidity of growth and exhaustive hemorrhage, and in which all other means have been tried unsuccessfully; for the cure of those cases of hystero-epilepsy which have well-defined menstrual exacerbations, and which have failed to yield to all other plans of treatment; and, finally, for those cases (which abound in every hospital for the insane) in which the mania or mental aberration is evidently dependent upon, or caused by, the act of ovulation. Indiscriminate, or what may be called hit or miss spaying, cannot receive too severe condemnation, and I doubt not but what the same obloquy and censure will overtake in the future the enthusiastic surgeons who resort to this procedure upon the slightest pretext, as overtook in the past those gentlemen who undertook to cure all the ills of suffering womankind by following the example of Baker Brown, in performing clitoridectomy.

Many of the methods herein described are already adopted by the mass of operators, but not a few of them are due to the ingenuity of Dr. Kelly, as I have before stated. The method of preparing the sponges originated, or at least was adopted, in the Pennsylvania Hospital some three years ago, and was brought to the attention of the profession in an article written by Dr. Thomas G. Morton, and published in the *Philadelphia Medical Times*, of November 13, 1886. Also the general subject of the technique of oöphorectomy has lately been well described by Dr. J. Craig Smith, in his work on *Abdominal Surgery*, published by Blakiston, in 1887; and likewise, also, in Hegar's *Hand-Book of General Operative Gynecology*, translated by Grandin, and published by William Wood & Co.

ON THE TREATMENT OF FŒTID CORYZA.

BY SOLOMON SOLIS-COHEN, A.M., M.D.,
PHILADELPHIA.

The obstinate "nasal catarrh," attended with excessive production of thick, discolored and offensive mucoid material, the discharge of which into the pharynx forms one of the most distressing symptoms, is a troublesome condition to treat; yet one which yields in greater measure than is commonly supposed, to active, intelligent, persistent, mild treatment.

I prefer the name proposed by J. Solis-Cohen—foetid coryza—to the more recent term, "atrophic rhinitis," because the latter designation is not always applicable. I have seen quite a number of cases in which there was little or no atrophy of the turbinated tissues; although it is undoubtedly true that in the majority of cases there is considerable atrophy of these structures—often, indeed, the entire lower turbinated body, bone and all, will have disappeared almost without trace. The name *ozæna*, frequently applied to this affection, is sometimes made so general, and sometimes so restricted, that I prefer to discard it altogether.

The remarks concerning treatment, that follow, are not concerned with those forms of foetid coryza which depend upon ulcerative processes, or the presence of calculi or other foreign bodies; in which cases removal of dead bone, or foreign body, is of course indicated, and the particular measures to be instituted will depend upon the extent and situation of disease. When there is but slight

ulceration, or beginning localized necrosis, scraping of the tissues, followed by cleansing and disinfectant measures, may alone be required.

In those cases where the nasal structures are as yet intact, or where there is simple atrophic change, the treatment, as a rule, is very simple; but it needs to be persisted in.

The first principle is cleanliness. No matter what the origin of the masses which are discharged, or which more often remain pent up in the nasal chambers, giving rise to offensive odors, their presence is an additional source of irritation, tending to prolong diseased conditions; and they must be gotten rid of.

Simply spraying the nose by means of an ordinary hand-ball atomizer will not answer. The nasal douche is apt to be abused, or used improperly, if entrusted to patients. The patient should be given an atomizer throwing a coarse spray, and directed to use some simple detergent solution, such as borax, soap bark and tar water, or even ordinary table salt in water (warm) thrice daily, in order to do what he can towards keeping the parts clean; but at first, frequent visits to the physician's office will be necessary in addition, for the performance of manipulations which the patient cannot exercise upon himself.

The passages should be first sprayed thoroughly with a coarse spray of a warm solution of hydrogen dioxide in distilled water (one part of a 15-volume solution to one or two parts of water), and then syringed with warm water, say 100° F., alkalized with borax or baking soda, to which also a small quantity of the *liquor carbonis detergens* may be added. The syringing must be carefully and gently done, first through one nasal passage, then through the other, anteriorly and posteriorly; the latter procedure being accomplished by means of a curved nozzle reaching up behind the palate. With a little practice these manoeuvres may be executed without discomfort to the patient. The masses loosened by spraying and syringing must be expelled by the patient's efforts, and the measures must be continued, supplemented if need be, by gentle swabbing with a cotton wad, until the nasal passages and pharynx are absolutely clean. The fact of cleanliness should be ascertained by rhinoscopic inspection. If the patient makes daily visits for the first two weeks, in an ordinary case, at the end of that time it will be found that it is both easier to cleanse the passages, and that the amount of material to be removed has considerably lessened. The patient will also report that he has had less difficulty in maintaining the clean-

liness secured, by his own little performance with the hand-ball atomizer. According to the progress of the case, the patient may soon be instructed to call only every other day, and his own home procedures be augmented by direction to snuff up from the hand, morning and evening, warmed milk, containing a pinch of table-salt. And as the improvement continues, the intervals between the active measures of the physician are gradually lengthened; until, in an ordinary case, at the end of six months the patient is able to keep himself comfortable by the use of the atomizer night and morning.

This persistent cleansing is the essential feature of the treatment. In addition, the individual conditions of different cases suggest a variety of measures. After cleansing, it is advantageous in cases showing signs of sluggish inflammation to apply to the nasal mucous membrane a solution of iodine and carbolic acid in glycerine (one grain each to the ounce) by means of brush or cotton-wad. Very often the insufflation of some disinfectant powder, such as iodoform or boric acid, or a mixture of the two, will materially assist progress.

When, notwithstanding the accumulation of fetid mucoid or muco-purulent masses, there is reason to believe that the normal moisture of the nasal passages is deficient, the inhalation of the recent vapors of ammonium chloride is quite useful in stimulating the mucous membrane to healthy activity. Inhalation through the nose with exhalation through the mouth, is preferable to the ordinary method of inhalation through the mouth with exhalation through the nose. The apparatus required is very simple and may be constructed for ones self with a hand-ball and a few bottles and glass tubes. It is important to wash the vapor thoroughly to remove any excess of either hydrochloric acid or ammonia.

This measure is particularly serviceable in cases in which the discharge consists almost wholly of dessicated masses of epithelium desquamated in an immature condition. The inhalation of oxygen is often beneficial. Thymol, eucalyptol and other balsamic and antiseptic vapors may also be inhaled. A weak solution of thymol in alcohol may be shaken up with warm liquid cosmoline and the nasal passages sprayed therewith.

Internal treatment is sometimes indicated. In strumous children, arsenical preparations may be given, of which I prefer Donovan's solution. Iodide of iron and cod-liver oil are sometimes useful. Potassium iodide may be given, to cleanse the passages by the flux of an artificial serous coryza, sometimes with

quite happy effect. I usually resort to this measure at intervals during the course of treatment. Cubeb may be administered in the form of the oleo-resin dropped on sugar, or in pill of the recent powder, to gently stimulate secretion during its elimination by way of the nasal mucous membrane. Ten to fifteen drops of the oleo-resin of cubeb three times daily, after meals, is the ordinary dose for an adult.

Diet should be regulated. It is important to forbid patients, especially children and young women, to eat candy, pastry, and sweets. The prohibition must be absolute. Starchy foods should be reduced to a minimum. The functions of the digestive and excretory organs, including the skin, must be carefully watched and maintained at a proper standard. Exercise in the open air and hygiene in general must not be neglected.

By carefully maintaining general nutrition and vigorous function, with the topical measures already described to secure and maintain cleanliness, and such constitutional medication on the lines indicated, as the individual case may require, the case of catarrh that cannot be greatly ameliorated must be exceedingly rare; and what is practically a cure may be obtained in the majority of cases. As a matter of course, the longer the disease has existed the longer it will be necessary to continue treatment. A month for a year, and three months in any case is a fair rule.

It may be necessary for the patient to continue cleansing the parts by means of his atomizer as a part of his regular morning toilet; but that surely is a very little matter in comparison with the discomfort and annoyance which the possession of a fœtid coryza entails upon the patient and those with whom he comes in contact.

I have deferred until now the mention of the cutting, burning and boring methods, happily becoming less prevalent in the management of all forms of nasal disease, in order to mention my conviction that they have often converted a simple case of catarrh, amenable to the mildest measures, into very obstinate cases of the affection now under consideration.

219 South Seventeenth Street.

—Three deaths from yellow fever and seventy-seven from small-pox are reported from Havana, Cuba, for the week ended December 24, 1887.

WOUNDS OF THE CRANIUM.

BY JOHN A. HOUTZ, M.D.,

LOGANSVILLE, PA.

The cases I here report may prove of interest to the readers of the *REPORTER*, not on account of anything new in their management, but as showing the remarkable and unexpected results sometimes following seemingly hopeless accidents of this character.

Case I.—March 28, 1883, I was called to see a boy, J. W., aged four years, who had been kicked by a horse. I reached the patient about three hours after he had received the injury and found him unconscious, with a compound comminuted fracture of the right half of the frontal bone. The toe of the horse's shoe, which was quite long, struck about the centre of the right half of the bone, driving it into the brain in the form of an inverted cone. Sharp spicula of the orbital plate penetrated the coats of the right eye, and evacuated its contents. I removed all loose fragments of bone, of which there were many, the largest several inches in length, and including the orbital plate. As I removed the fragments, consciousness returned. Lacerated brain oozed out of the wound to the amount of at least a tablespoonful, while it was being dressed. Having removed all loose bone, and cut away the jagged edges, I syringed the wound thoroughly with warm carbolyzed water. The skin was then loosely approximated with silk sutures, allowing free drainage, and dressed with lint made of old linen rendered antiseptic with carbolyzed oil. A compress and bandage completed the dressing. The patient was seen and the wound dressed daily until April 22, and after that at intervals of a few days until May 24, when he was discharged, perfectly restored both as to mental and physical condition, with the exception of the loss of the eye and slight deformity at the site of injury. During the whole course of the case, the temperature did not once rise above the normal. He complained of no pain, had a good appetite, and slept well. At one time—I think about the second week—the dressing remaining on longer than usual, there was slight twitching of the left arm; but that disappeared on the renewal of the dressings. The general treatment consisted in a regulation of the diet, having his bowels regularly moved, and keeping him in a cool, quiet and darkened room.

Case II.—W. E., aged nineteen, was caught in a circular saw, March 28, 1887. On reaching him, about four hours after the occurrence of the accident, I found him in

the following condition: A saw-cut wound, extending nearly horizontally around the head from a point slightly to the left and above the occipital protuberance, around the right side of the head, above the ear, and ending below the right eye. From near the posterior point of the cut to the ear, the wound penetrated the skull and brain fully an inch and a half. The cut through the skull was a half inch wide. Brain was freely oozing out of the wound. Inside of the cranium, and in the brain, were hair, saw-dust, pieces of bark and parts of his hat. His left hand was cut entirely through the carpal joint, from back to front, leaving only parts of the soft tissues in front, not, however, severing the radial and ulnar arteries. The joint was laid widely open, and some of the carpal bones were cut into pieces. Hemorrhage was slight. The general condition was that of severe shock. He was comatose; extremities were cold; pulse was weak and irregular. When aroused from his stupor, he complained of pain more particularly in the hand and arm. I gave him, hypodermically, morph. sulph., gr. $\frac{1}{4}$; and atrop. sulph., gr. $\frac{1}{16}$, and small doses of alcoholic stimulants. The hair was carefully removed from the scalp, in the region of the wound. After being cleansed of all foreign substances and loose bone, and the sharp points of the skull cut away, the wound was thoroughly syringed with a 1 to 1000 solution of hydrarg. bichlor., and the scalp brought together with coarse silver wire sutures. The stitches were sufficiently far apart, over the brain wound, to allow free drainage. The dressing consisted of oakum, moistened with the bichloride solution sprinkled with iodoform, a compress of antiseptic cheese-cloth, and a bandage also washed in the antiseptic solution. After the first week, the moistened oakum was also saturated with carbolized oil, and a perforated tin splint put over the dressing to keep it in place. The wound at the wrist, after the removal of injured bone and dirt, was dressed in the same way, and the arm put on an anterior splint. The patient was seen daily, and the wounds thoroughly cleansed with the bichloride solution, and dressed as above stated, until the latter part of May; and after that, at longer intervals, until the date of his discharge, June 18. Antisepsis was carefully applied at all the dressings, and injured and protruding brain removed, either by syringe or by throwing a silk ligature around the base of the protrusion, and cutting it away with scissors. Altogether, several ounces of brain came away at the dressings, besides what was cut out by the saw at

the time of the occurrence of the accident. After a few days, the patient's temperature rose to 103° Fahr., and continued for about four weeks at 102° to 103°. During all this time he was wildly delirious, the greater part of the time not recognizing his most intimate friends. His general treatment consisted in a restricted diet, purgatives and aconite to counteract inflammatory symptoms, morphia sulph. and potassium bromide to relieve pain and produce rest. Cold applications were kept continuously at the top of his head. When the patient began to grow weak, the aconite was gradually withdrawn, and the diet made more nutritious. The wound healed rapidly, so that at the end of the second week it was healed to the points where the skull was penetrated; and as soon as brain matter ceased to protrude, that part also closed; so that by the middle of June, the whole cut was firmly united. The wound of the arm also healed very rapidly, and with but slight suppuration. The joint is firmly ankylosed, and the power of extending the fingers considerably limited; but flexion is normal. He is able to grasp any ordinary object. By the time the wounds were closed his mind had entirely cleared up, and his intellectual powers seem as good as prior to the accident. He says he never has headache, and feels in every way as well as he ever did. He is now working on the same saw-mill on which he was injured, and is making a full hand. I attribute the successful issue of these cases largely to free drainage and antiseptics, which were as carefully applied in both cases as circumstances would permit.

REST IN SYNOVITIS OF THE KNEE-JOINT.

BY G. W. FUREY, M.D.,
SUNBURY, PA.

One evening in the latter part of May, 1881, I was called to see L. C—, nineteen years old, female. I found her completely exhausted by pain, fever, loss of sleep, and inability to take nourishment. Some of her relatives and members of the family were standing around weeping, while she lay moaning with pain one minute, and fainting into kindly unconsciousness the next. She had been able to take no material amount of nourishment for several weeks; and no sleep, except as induced by morphine. Examination soon revealed that I had to do with an acute synovitis of the left knee-joint. The last physician who had attended her had told the parents there was no hope, and that he

could do no more, but would see her again if they thought it of any use. It was evident that if anything was to be done, there was no time to waste, so I proceeded to prepare and apply a Bavarian splint. The slightest jar in the room was intolerable to the patient, and, of course, the movement necessary to apply the cast caused great pain, as I did not dare to administer an anæsthetic owing to the prostration present. The patient was in a faint most of the time until the cast had assumed considerable stability, when she rested easier, complained less of pain, and, in fact, rallied just in proportion as the knee was afforded equal support and rest. Before the plaster-of-Paris had set, she had fallen off into an easy, natural slumber—the first for a month or more. Her pulse became stronger, her temperature more normal, and every one concerned felt better. It was ten o'clock when the limb was bolstered up with pillows in an easy position, and left to rest.

I remained till midnight, at which time I thought it best to rouse her up. As soon as she was fully awake, she looked around the room, and, with an eagerness that was pitiable, demanded some food. This I allowed her to have in moderation. After eating all I permitted, she expressed herself as feeling "first rate," and dropped away into a nice sleep, which lasted until morning.

At my second visit, twenty hours after the first, I listened to a full history of the case. She had fallen down a flight of seven stone steps seventeen weeks before, striking her knee; although not seriously hurt in other respects, inflammation of the injured knee soon set in, and it gradually became more and more painful and swollen. A physician was called, who remained in attendance for about four weeks, applying almost everything but rest. The case not getting any better, he was discharged, and I was called in. I was shown about a dozen bottles from which she had been taking medicine. Innumerable liniments, poultices, etc., had also been used; but no restraint of the mischievous contractions of the thigh muscles had been attempted, and the consequent flexion of the leg.

At my second visit the patient was complaining of considerable pain, and was rather depressed and discouraged. But when I assured her that the conditions were just what I expected and wished for, she brightened up. I removed the first splint with care, and, although occasioning considerable pain, soon fitted on another, which, of course, gave her immediate relief, and enabled her to sleep well all night. Sometimes it would be

once a day, and sometimes every alternate day from this time on till the girl was able to sit up, that the diminution of the swelling would allow motion in the joint, and consequent pain, and I would have to put on a new splint. In three weeks she began sitting up, and in six weeks she was walking with crutches.

There was acute flexion of the joint at first, which I took the pains to reduce while applying splints, so that when I could make no further extension, it was at something more than a right angle. I now discarded the use of plaster-of-Paris, it having occurred to me that I could do with sole-leather splints all I could with the former, and something more, viz.: produce a leverage that by continuous effort would tend to strengthen the limb. This I happily accomplished in the following way: Making as much extension as possible, I cut out of heavy paper two patterns, one for the inner and one for the outer side of the knee. These I trimmed so that when their edges met in front and behind the limb, they neatly fitted to the same extent the Bavarian cast had done. From these patterns I marked out on other paper the patterns I was after. This I did by increasing the knee-angle about three degrees. These latter patterns I used in shaping my leather splints. After making these pliable in warm water, I began at the lower part, and with a roller brought the edges together as I slowly and gently ascended the limb. There was not much trouble about it, and when it was at last "on," I was rewarded in seeing a straightening of three degrees. This method was pursued as often and as long as I could accomplish any improvement. It was the middle of August before the limb was as straight as it was safe to leave it; considering the obstinacy and inclination to remain stiff.

In September, while I was deliberating upon the expediency of giving an anæsthetic and forcibly breaking up the adhesions, her father suggested taking her to Philadelphia. I readily acquiesced, and gave him a letter to one of the leading surgeons of that city. She was there placed under an anæsthetic, and the joint was well manipulated. In a few days she returned to her home, bringing me a letter from the surgeon, suggesting that I continue to manipulate as before, confining the joint as it had been. I have no doubt this would have, in a reasonable length of time, resulted in complete restoration of the joint to a healthy condition; but the patient caught a severe cold coming home, which, in spite of all we could do, settled on her

lungs, and resulted in consumption, with which she died about a year afterwards. The knee trouble never occasioned any further discomfort or pain, however; and, although she was obliged to use a crutch or cane, she was thus able to get exercise and fresh air.

The only feature about this case that renders it worthy of being reported, aside from my plan of adjusting the leather splint, is the treatment—or rather the want of treatment this patient was subjected to for so long—seventeen weeks—by the two physicians who had it in charge at first. They endeavored to subdue the local disease with drugs; I did subdue it with *rest*.

SOCIETY REPORTS.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, December 28, 1887.

The President, J. SOLIS-COHEN, M.D., in the chair.

After the reading of the papers by DR. CHARLES MEIGS WILSON and by DR. HOWARD A. KELLY, published in this number of the REPORTER, the discussion was opened.

Discussion.

DR. JOHN C. DACOSTA said: Believing that many unnecessary operations are done, and that it is better practice to cure a woman and leave her with her organs intact, rather than by a brilliant operation to unsex her, without the certainty and with only the hope of relief, I took decided ground at the last meeting of this Society, in November, against the great number of abdominal sections now being made, including those made for "pain alone" (which is the subject for this evening's discussion), citing these cases to sustain my argument, viz.:

First. That a large proportion of the operations as done, and for the reasons alleged for operating, are unjustifiable.

Second. That the published reports of many cases said to be cured by operation are unreliable. For, though the operator may have been honest in thinking, when he made his report, that he had cured his patient, the after-history of the case sometimes showed failure.

Third. That the spaying of women for pain alone, and for many of the other supposed causes of trouble for which it is done, and in the miscellaneous way in which it is done, is unwarranted.

Having argued these points fully at the meeting a month ago, I this evening only restate my heads of argument, leaving the discussion to those gentlemen who have not yet had the opportunity to express their ideas.

DR. W. H. PARISH said: Twenty years ago very little was taught of the diseases of the tubes, and of any but the more bulky diseases of the ovaries. More recent experience and more recent literature are teeming with abundant evidence that diseases of the appendages, and more especially of the tubes, are of really the greatest frequency. Most usually the affliction is inflammatory in character, and dependent upon catarrh, gonorrhœa, or sepsis. I wish the readers of the papers had spoken of the prevention of these affections, and especially of the means of preventing inflammatory tubal and ovarian disease reaching that stage in which removal by surgical skill is indicated. The duty of the day is to point out the means of prevention rather than to permit professional interest to continue centered in the operation of removal. At the time when removal of the appendages is justifiable, sterility has been already established by the disease itself, and such treatment as will obviate that stage of progress of the disease which indicates surgical interference will also tend to lessen the probability of the establishment of sterility. What is to-day a mild inflammation of an appendage is liable—it may be very quickly—to become a condition even threatening life; and I am confident that some of the measures to-day directed by many against associated vaginal or uterine inflammation do frequently aggravate greatly a latent and subsiding salpingitis and ovaritis. Too irritating an application to a gonorrhœal endometrium will certainly convert a quiescent inflammation of the tubes into a pus-forming salpingitis. The same is true in reference to application made in other forms of endometritis. Gonorrhœa is the most important cause of dangerous salpingitis. The German writers pronounce the catarrhal form of most frequent occurrence, but they find this form most common in prostitutes, and we are most likely to assume, and correctly, that the disease in the prostitute is of gonorrhœal origin.

Hemato-salpinx often endangers life, inasmuch as rupture of a tube containing such altered blood as is found in that affection may originate fatal peritonitis. Now one of the causes of hemato-salpinx is stenosis by narrowing or by flexion of the cervical canal—securing the patulency of that canal may permit the tube to empty itself gradually into

the uterus, just as it does after opening up the vagina or uterus in hemato-metra and hemato-colpos. The inflammatory cases of tubal and ovarian disease are divisible into three groups: one of mild character, on which probably no one would operate for removal; another group, in which the accumulation of pus is so large and the symptoms so grave, that probably all operators would agree as to the necessity for removal; and then there is an intermediate group, in which surgical opinion would be at variance as to the propriety of removal. In this group the tubes and ovaries are in a condition of more or less subacute or chronic inflammation, with extensive adhesions, and probably some cystic degeneration. Physical examination does not always in these cases clear up the indications. The environments of the patient, the symptoms and the progress of the case, after prolonged judicious treatment, must as yet decide the question.

When, after removal of the inflamed appendages, the relief is not complete, or it may be there is no relief, the explanation is to be looked for often in the incomplete character of the removal,—a portion of the tube, especially the uterine portion, or a portion of the ovary, has been left, and this becomes the focus of other trouble.

There are sins of omission as well as commission in reference to this operation, and I believe that the profession has even yet more of commission resting on it. I am not an extremist, and have not operated for removal of the appendages many times.

DR. WM. S. STEWART said: I belong to the conservative class. Battey's operation is not a good one in general. There is danger in operating *per vaginam*. In one case we had a hernia. In one case I succeeded in passing a small sound up into a large abscess (of left tube), and recovery ensued after discharge of pus through the uterus. Those cases in which failure to give relief to pain is most evident, are those in which we are most justified in operating (as the results afterward proved). In one obstinate case in a single woman, with hypertrophied ovaries, and obliterated tubes, the patient was slow in recovering, but has at last reached a comfortable state. She was an intolerable sufferer; internal medication, either by mouth, rectum, or hypodermically had little or no effect. Relief promptly followed removal of the ovaries.

DR. E. L. DUER said: I think this Society can endorse these papers as representing the advanced state of knowledge on these points. Dr. Kelly has emphasized for us the advantage of the educated touch. Dr. Coe, of the

Woman's Hospital, of New York, states that but one-fifth of the ovaries removed are diseased. Pain is such a prominent symptom that it can hardly be called a neurotic manifestation. It is often due to adhesions or to pressure, excepting cases of gonorrhœal origin, or pus-containing tubes. This question has resolved itself to me into one of environment. The poor woman who must keep up and at her work, has no relief but by the knife. The rich woman who can be cared for, with rest, and favorable surroundings may be relieved, sometimes, for example, by the patient and persistent stretching of adhesions and restoring the circulation of surrounding parts.

DR. J. PRICE said: It has been our custom to operate only for diseased tubes or ovaries, and we always find disease. Perhaps we cannot say that it will be abscess or pus, but it will always be disease. I do not believe that it is possible to diagnose everything until the abdomen is open. Dr. Emmet says: "It has been held that, as a rule, little evidence of previous cellulitis can be found when operating for the removal of Fallopian tubes." And that his experience confirms the accuracy of this observation. This has not been my experience. The adhesions have always been quite general when operating for disease only. Dr. Kelly refers to hemorrhage and Dr. Wilson to sepsis. Dr. Martin talks more about sepsis than any other operator, and his details of antiseptic precautions are quite elaborate. His mortality of twelve in seventy-two would stay Mr. Tait's hand. It is time to put this question in proper shape lest some good man be held criminally responsible for wisely and reasonably avoiding these solutions and dressings so highly lauded. We will take the statements of prominent operators. One is that "unless chemical or antiseptic solutions are used, the operator will be held criminally responsible." Another, that "men operating without solutions, is recklessness bordering on criminality." The opinion and practice of the skilled members of the profession will be incorporated in and make the law governing in all cases. Prof. Leopold has 110 completed ovariectomies—four died of septic infection (three to six per cent.), and he uses solutions. I believe that the great danger is from hemorrhage, not sepsis. The ovary and tube should be delivered, and this leaves but a small stump to be tied. I am not in favor of operating except for disease. He would not trephine for clavis hystericus or take out the eye for the agonizing pain complained of the next day by the same patient

who wants her ovaries removed for abdominal pain. We hear a great deal now of imperfect operation, necessitating a second operation. Mr. Tait and Dr. Keen have reported cases.

DR. SINKLER said: The operation of removal of the ovaries is of great interest to neurologists, because many of the cases of hysteria and nervous prostration which came under their care are connected with pelvic pain or dysmenorrhœa. Besides Charcot's observations in hystero-epilepsy, relieving the paroxysm by pressure over the ovaries would seem to indicate that in such cases a cure might be expected from removal of the ovaries. The result of the operation, however, although satisfactory in some, is disappointing in a great many cases of this character. I have had under my care quite a number of patients in whom the ovaries had been removed for hysteria, neurasthenia, pelvic neuralgia, etc. One case, about twenty-three years of age, an extreme case of hysteria and a persistent masturbator, was under my charge at the Orthopædic Hospital and Infirmary for Nervous Diseases. After seven months, being unimproved in every respect, she was discharged, and was taken by her friends to another hospital, where her ovaries were removed. After a few months she again came under my care, and I found her in as bad a condition as ever. The hysteria was as marked, and she masturbated very often. She did not improve in my hands, and I have recently heard of her, after an interval of nearly three years, in a worse state than ever before. Another case, is that of a lady of forty-two years, who, three years ago, had the ovaries removed for dysmenorrhœa, pelvic distress, and general neurasthenia. After a course of test treatment she has improved greatly; but it is an interesting fact that she still has attacks in which she says there is a sensation of uterine contraction and pressure, just as there was before the operation.

In conclusion, while I would hesitate to recommend removal of the ovaries for the relief of pelvic pain alone, I have no question in my mind that there are many cases of hystero-epilepsy and extreme neurasthenia dependent upon violent and prolonged dysmenorrhœa or ovarian pain, in which it seems to me that the operation is not very justifiable, but is decidedly indicated.

DR. CHAS. K. MILLS said: The ground taken by Dr. Kelly can scarcely be attacked if, as I understood him, operation should be only undertaken, in the first place, when local disease can be clearly made out, and, in the second place, such disease can nearly always

be recognized by proper methods of examination. Certainly, however, in very many cases of pelvic pain, no disease of the ovaries, tubes, or uterus can be recognized, or, indeed, is present. We have true neuralgias of these organs, as we may have of any viscus. Before too much significance be given to the ovaralgia of Charcot, it should be recalled that even in male hysteria, pain in one or the other iliac region has been met with in a number of reported cases. As to the view expressed by Dr. Wilson, that operation is sometimes called for when hystero-epileptic and other morbid phenomena are exhibited at or near the menstrual period, we should hesitate in accepting this dictum. All nervous symptoms are likely to be aggravated or excited in neurotic women at the menstrual period. In the *American System of Practical Medicine*, I have reported two cases of hystero-epilepsy in which the operation of oöphorectomy was performed. In one of these cases clitoridectomy was also performed. The hystero-epilepsy was not cured in either case. My conclusions are given in this work as follows: "With reference to oöphorectomy for hystero-epilepsy, or any form of grave hysteria, it may be concluded: 1. It is only rarely justifiable; 2. It is not justifiable in the case of girls who have not menstruated; 3. When disease of the ovaries can be clearly made out, by local objective signs, it is sometimes justifiable; 4. It is justifiable in some cases with violent nymphomania; 5. The operation is frequently performed without due consideration, and the statistics of the operation are peculiarly unreliable."

We have few reliable statistics with reference to the performance of pelvic operations for the relief of insanity. In these days, when operations are talked about in every house and almost on every corner, cases of ovarian monomania are likely to be met, cases in which the women are determined to be operated upon whether or not; some of these cases are undoubtedly like those of sexual hypochondria or monomania in man, in some of which self-castration is performed. In the wards of the Insane Department of the Philadelphia Hospital, is now a patient who has removed both testicles by successive operations, under the influence of such a monomania. Operation upon the ovaries or tubes, or both, in cases of insanity, should be restricted to those cases in which either local disease of long standing can be made out, or in which the outbreak of insanity can be clearly traced to disease or impaired function of these organs.

DR. KEEN said: In relation to hemorrhage, one little wrinkle may be of value. I have never had the ligature to slip from the pedicle; and this, I believe, to be due to the employment of this method: I pass the double ligature as usual, cut it in half, tie each half of the stump, and then, without cutting the ends, treat each ligature as follows: I thread one end through a needle, and transfix the tissue near by by this end, and tie a second knot. This fixes the ligature in place, so that it is impossible that it shall slip.

DR. M. PRICE said there have been complaints of fistula lately—which may be due to imperfect method of introduction of the drainage tube. We usually introduce it well down into Douglas's pouch, well below the bowels. When there has been pus, we believe it to be necessary; if there be little oozing we remove it after a day or two, but otherwise retain it as long as necessary, and have never had occasion to regret it. I do not see what there is to fear.

DR. KELLY said: The cases cited by Dr. Sinkler and Dr. Mills have a direct bearing upon my remarks, and show how important it is that the gynecologist should frequently seek the counsel of the neurologist. In reply to Dr. Price, I would state that a neglect of antiseptic precautions is criminal. The Society will not, however, understand me by this to refer in any way to a use of *solutions*, but to the antiseptic conscience, which is the creation of this generation, and in abdominal surgery often does its work as well with soap and water. The obstetric pad which I described, has long been in use at my hospital, and I know of nothing antedating my use of it. Extensive follicular degeneration of the ovaries never *per se*, requires operation, but this is often made necessary by the associated symptoms. All my cases have been benefited, while several continue to suffer from pelvic pain, they are entirely freed from the menstrual exacerbations, most have been raised up from chronic invalidism to perfect health, one attaining this not earlier than a year after the operation. In a case of epilepsy with most marked menstrual exacerbations and severe ovarian pain, the epileptic attacks continue, but she is free from pain, and Dr. Kerlin, under whose charge she now is, considers her improved.

DR. W. W. KEEN read a paper on

A Successful Cystotomy after Failure of Suction to Remove a Piece of a Catheter from the Bladder.

The recent suggestion of Dr. De Forest Willard, and Reginald Harrison (*Lancet*, Oct.

29, 1887) to extract foreign bodies from the bladder by the rubber bulb and evacuator of Bigelow's litholapaxy instrument, makes a valuable addition to our surgical resources in these troublesome cases, and is my especial reason for bringing to your attention to-night the following case. The failure of the method in this particular instance was due to special reasons.

J. W., a healthy man, aged seventy-five years, living in Elkton, Md., had suffered for a considerable time with recurring retention of urine, and cystitis following an enlarged prostate. Dr. Charles M. Ellis, his attending surgeon, very wisely taught him the use of the catheter, which he has employed daily for some months. The Nélaton catheter (No. 22 French), which he has employed, having lost its rigidity, he whittled a pine stick to the necessary size, and sought, by means of this, to introduce it into the bladder, November 7, 1887. In the attempt the catheter broke, and a piece, subsequently ascertained to be $4\frac{1}{2}$ inches long, broke off and passed into the bladder. Severe pain and retention followed immediately, and persisted until after I operated upon him. Dr. Ellis, having failed in his efforts to extract the fragment, sent him to me, as the surroundings at his home were most unfavorable for any operation.

Three days after the accident I made similar and repeated unsuccessful efforts at extraction with forceps and lithotrites. I was not even able to detect the fragment.

On November 11th and 13th I attempted to remove it by suction with Bigelow's evacuator. On the last occasion Dr. Willard kindly helped me personally. We repeatedly filled the bladder with warm boiled water, being careful to keep the extremity of the evacuating tube just at the vesical extremity of the urethra, but suction had no effect in engaging the fragment. This was amply explained later by finding that it lay crosswise, and was so long that both ends were held fixed by the walls of the bladder, while the relative rigidity of the short fragment prevented any possibility of its being brought to the opening of the evacuating tube, though we sought for it through the tube by Dr. Willard's forceps. An evacuating tube with a lateral eye gave no better results than one with an opening at the end. I also used a rectal bulb filled with seven ounces of warm water, but all to no purpose.

After debating between suprapubic and lateral cystotomy, I decided upon the latter, in consequence of the observation of Harrison and others, that the prostate sometimes

shrinks after perineal cystotomy, when a tube is retained in place for some time. Accordingly Dr. Wm. J. Taylor etherized him, and I did left lateral cystotomy with a staff. The operation presented nothing unusual. The prostate was markedly enlarged in its lateral lobes, so that I was barely able to get my finger into the bladder. With the ordinary lithotomy forceps I easily seized the fragment by the middle, removed it, and introduced a rubber drainage tube with a flange, by which it was easily retained in place by tapes. His temperature never rose above 99°, and in six days he went home, with my instructions to retain the tube in place for two months, and then to remove it and allow the opening to heal. By this means I hoped to be able to avoid the necessity for the subsequent daily use of the catheter.

December 5, after nearly five weeks retention of the drainage-tube in the bladder, I found that, owing to his feebleness, want of care and cleanliness, the tube was proving a source of irritation and slight suppuration. Accordingly, December 10, I removed the tube. In three days the wound closed sufficiently to cause him to void his urine by the urethra, and he was no longer obliged to rise at night to relieve the bladder. The prostate has shrunk to some extent, so that he no longer needs to use a catheter. Whether this will be permanent, or is only temporary, time alone will determine.

DR. J. H. PACKARD, in opening the discussion upon Dr. Keen's paper, said: I have listened to Dr. Keen's account with much interest, and merely wish to call the attention of the Society to the value, in some of these cases, of the suprapubic operation. This is not taught in the schools, and is scarcely mentioned in text-books, except, perhaps, in the way of condemnation. While not an advocate of this procedure to the exclusion of others, I feel that it has been greatly undervalued, and allowed to fall into undeserved neglect. Especially in cases of foreign bodies, and when a long article is placed cross-wise, there may be difficulty in extraction through a perineal opening. Sometimes, either in these cases or in those of stone, such violence is inflicted upon the vesical wall as to increase materially the risk to the patient. I have seen instances in which I could not but think that a fatal result was largely due to this cause. As a rule (to which I know of but one recorded exception), the injection of seven or eight ounces of water causes the bladder to bulge up, the peritoneum being lifted away from it, so as to afford abundant space for direct

entry into the vesical cavity. Through the opening thus made, the finger can be introduced and the cavity explored. After the removal of the offending body, the wound can be sutured, except just where the drainage tube—which I have always employed—is passed in. Through this tube the urine flows away freely.

When infiltration of urine occurs, it is, in my opinion, almost, if not quite, always due to the fact that the incision being made at a point too low down, the contraction of the emptied bladder brings the opening just behind the symphysis; the urine is thus obstructed, and finds its way through the meshes of the areolar tissue. Diminution in the volume of the prostate occurs after the suprapubic section, just as Dr. Keen states it takes place after the perineal operation. I could cite four or five cases in which I have noted this; it would seem to be due to the relief of pressure and the cessation of straining.

DR. KEEN said: In this case I had to deal with a known flexible body, and so there was no trouble in the case. But had it been a rigid body, I would have done a suprapubic operation.

GERMAN MEDICAL SOCIETY OF PHILADELPHIA.

Meeting of December 12, 1887.

DR. LAWRENCE WOLFF read a paper on

"Ptomaines,"

of which the following is an abstract:

He first referred to the long-known toxic effect of decaying cadavers, and to the fact that their toxic effect was attributed to a chemical poison rather than to the transmission of a special micro-organism creating a poison in the new soil. He quoted the work of Pasteur and others and their effects upon medicine. He argued for the specific action of the microbe, from the fact that albuminoids can be preserved indefinitely if protected from them, reasoning that an organized body does not bear within itself the means of destruction or decomposition after death. He stated that other basic substances generated during life, such as the vegetable alkaloids, have great similarity with the cadaveric base developed through the influence of bacteria, and dwelt on the definite relations necessary between agency and soil to develop certain products. He considers the action of bacteria a chemical one, in consequence of which complex molecules are split up into simpler

ones. He recognizes the albuminoids thereof as the necessary pabulum of the microbe; but denies the excretory character of the ptomaine, which he holds to be simply by-products of decomposition. He quoted at length the history of our knowledge of the ptomaines, and accorded to Dupré and Bence Jones the priority of discovery in the isolation of animal chinoidine. Sonnenschein and Sulzer next produced ptomaines resembling atropine and hyoscyamine, while Rorsch and Fassendre next separated a base giving some of the reactions of digitalin. Schwannert also isolated a ptomaine. Dr. Wolff next mentioned the labors of Francisco Selmi and his work in various poison cases, and those of Liebermann, who obtained a coniine-like ptomaine, as did Brouardel and Boutmy, who claimed for ptomaines the power of reducing potassium ferricyanide—a claim which was soon proven fallacious.

After again referring to the vast labors of Selmi, Dr. Wolff proceeded to the consideration of pathological ptomaines. He claimed by analogy that, as the action of alkaloids is determined by their chemical structure, so must that of ptomaines be. And as special micro-organisms produce specific bases, he argued that the type and course of infectious diseases could in this way be explained. Thus, he said, pathology has fallen to the chemist, as was predicted by the late Austin Flint. He laid stress on physiological experiments made with ptomaines, and contended that when once the specific poison of a disease is known, the antidote will be indicated by its physiological action. He referred to Nencki as the first who furnished pure ptomaines, and then to the exhaustive labors of Brieger, in regard to the poisonous action of peptones and the conditions favoring the development of ptomaines. Dr. Wolff referred to the tyrotoxin of Vaughan, and laid stress on its importance as a forensic ptomaine, and one pathognomonic of cholera infantum. He then in a *résumé* dwelt on the generally transient character of the ptomaines and their instability as chemical bodies. He asserted that the true pathological ptomaines will be found in the pulmonary exhalations, and stated that he is engaged on experiments with a view to test his theory.

In opening the discussion.

DR. WEED related a case of sausage-poisoning, in which the well known symptoms of gastro-intestinal irritation quickly followed the ingestion of the food, but disappeared on the second day. On the ninth day, an attack simulating cerebro-spinal fever appeared, with headache, vomiting, retraction

of the neck, delirium, spastic contractions on irritation of all the voluntary muscles, acetonuria, and death by failure of respiration. The autopsy revealed only hyperæmia of the cerebro-spinal meninges. Now, in considering this case, the primary gastro-intestinal phenomena are readily understood to be those of local irritation. But those appearing after nine days, do they speak for a late intoxication, or for an infection after a period of incubation? Is there any known ptomaine which, introduced into the gastro-intestinal canal, would be so gradually absorbed, and so slowly eliminated, as to exhibit cumulative action at the end of so long a period?

DR. FORMAD called attention to the fact that cadaveric poisons are volatile, so that the danger from dissecting wounds diminishes from day to day after death. Virchow and Von Recklinghausen advise waiting until the third or fourth day with the autopsy in all cases of infectious disease. And even healthy tissue, as in sudden death from accident, or taken from the living animal, is highly poisonous, if introduced under the skin. So too is the saliva, of which the serpent virus is but a specialization.

Another reason for delay is the fact that the less dangerous bacteria of putrefaction will ultimately crowd out the specific bacteria of the disease. He confirmed Dr. Wolff's statement that oxygen is necessary for the development of the bacteria—his investigations, made in conjunction with Professor Vaughan, upon the bacteria of diphtheria in milk, having illustrated this fact. In his opinion, bacteriology has as yet offered nothing absolute in the diagnosis of disease, except in the cases of anthrax, tuberculosis, and relapsing fever; and he hopes that chemistry will in the near future give us the pathognomonic principles of disease.

DR. MAYs said: It is not true that all animal poisons are the products of the development of micro-organisms, and cited as instances the toxic effects of saliva, its analogue the serpent-venom, and even the physiological peptones, when introduced under the skin. So too papain, of vegetable origin, in which no bacteriological agency is claimed, is identical in its effect with the rattlesnake poison. Could not, therefore, certain cases of ptomaemia be due simply to the presence of physiological materials in the wrong place: as, for example, the hydrated albuminoids in the circulation? The poison in Dr. Weed's case was probably the "Wurst-Gift" of Brieger, analogous in its effects to curare.

DR. WISE called attention to the fact that certain savage nations live almost exclusively on the meat of animals which died a natural death, and whose meat is partially decayed—such as the nomadic Arabs and the Norwegian fishermen—without experiencing any ill effects.

DR. MILLER emphasized the element of susceptibility in the production of the phenomena of ptomaine poisoning, and cited cases, one of tyrotoxin and one of post-mortem poison, in which only certain individuals experienced ill effects.

DR. ROSENTHAL called attention to the fact that in the cases of ergotized rye and fish-pickle, vegetable and animal tissues furnish identical poisons, namely, propylamine and trimethylamine.

DR. SEILER, in reply to Dr. Wise, said that immunity results from the habitual introduction of toxic elements into the system, as in the case of the poison of insects. He questioned whether the endemic leprosy among the Norwegian fishermen might not be in part due to the very habit cited.

DR. MUEHLECK denied the toxicity of saliva, *per se*, quoting the authority of Frerichs, whose experiments showed his own saliva to have been at times toxic, and at others not, and attributed this difference to the demonstrated presence or absence of micro-organisms in the respective observations.

DR. COLLINS expressed his belief that ptomaines are constantly produced in the body, and that auto-infection is prevented by the simultaneous production of antagonistic ones.

DR. WOLFF, in closing the discussion, said that in Dr. Weed's case the primary phenomena were due to direct irritation, while the later symptoms were of bacterial origin. There is a remarkable resemblance between ptomaemia and curare poisoning. As we are ignorant of the mode of preparing this drug, who knows but what decayed animal tissue may be one of its ingredients? In reply to Dr. Wise's remarks, he called attention to the fact that cooking decayed meat would drive off the volatile ptomaines, and kill the bacteria; and that when such food is taken raw, the process of digestion effects the same result.

—Dr. Gross, of Geneva, has lately experimented with himself in hanging. His experiments established that the sensations were only warmth and a burning in the head, without convulsions. Of course, his experiments didn't go very far.

PERISCOPE.

Sudden Death in Typhoid Fever.

Dewèvre is reported in the *Medical Chronicle*, Dec., 1887, as saying that (*Archives générales de Médecine*, October, 1887) the frequency of sudden death in typhoid fever has been variously estimated by different writers; it probably occurs in four per cent. of the cases. It is most often met with between the ages of 22 and 25, being rare in infants and old people. It occurs in males more frequently than in females, the proportion being rather more than four to one, and often in those who have been previously robust. It is most common in the third week of the disease, the largest number of sudden deaths occurring in the medium form of the disease rather than in the severer or slighter forms. It does not appear that relapses are very favorable to its occurrence. In some epidemics it is more frequent than in others. M. Hardy considers quinine when given in large doses to be a cause of sudden death in typhoid. It generally occurs after some effort, movement, or emotion, and occasionally during sleep. In the majority of cases there are certain premonitory symptoms which foreshadow a fatal issue; but these may be entirely wanting. Amongst the most frequent may be mentioned troubles of the respiratory apparatus, *e. g.*, dyspnoea, the cause of which the most scrupulous examination fails to discover; it occurs and ends suddenly, and is accompanied by a sense of agony closely resembling uræmic dyspnoea. Severe bronchitis and pulmonary congestion are also met with. On the side of the nervous system, syncope and convulsions occupy the most prominent position, while delirium and insomnia are not infrequent. Sometimes suppuration or hemorrhagic otitis complicates the case. Contractures and paralyses of different kinds are also met with. Circulatory troubles occur next in frequency to nervous disturbances, and they play an important part in the production of sudden death, as will be seen later on. Albuminuria is a common complication. Tympanitis has also been known to cause a sudden and fatal issue in typhoid. Sometimes the patient dies suddenly, without any of the foregoing symptoms being present. The frequency of the pulse affords a reliable guide to the state of the heart muscle, especially if the arterial tension be at the same time carefully noted. Hayem regards intermittence of the pulse as significant of impending danger; but the author thinks the danger has been over-estimated, inasmuch as

it frequently occurs at the end of typhoid, and, according to him, indicates that convalescence is approaching. Of all the premonitory symptoms which may foreshadow sudden death, the author regards convulsions (which may be general or local, slight or severe) as by far the most significant of approaching danger.

Post-mortem Appearances.—In 48 cases no lesion capable of causing sudden death was found, but in all the others a sufficient cause was demonstrated. It is interesting to observe that in the great majority of cases the intestinal ulceration was in the process of cicatrization. In sixteen cases the heart was pale, soft, and of a "faded-leaf" color, with fatty and granular degeneration of the muscular fibres. In a few cases proliferating endarteritis of the smaller vessels supplying the walls of the heart was noticed. Myocarditis, endocarditis, ante-mortem coagulation, etc., have also been met with; also, embolism of the pulmonary artery in seven cases. Amongst other lesions may be noted bronchitis and pulmonary congestion and nephritis. Cases of sudden death in typhoid may be divided into two classes, viz., those in which the autopsy reveals pathological changes which are sufficient to account for death; these form two-thirds of the fatal cases. In the other class are those in which no satisfactory cause of death can be discovered. The author thinks that pulmonary embolism and cardiac thrombosis are by no means a common cause of death. Hayem thinks that a peculiar form of degeneration of the heart muscle is constantly present in sudden death from typhoid, the cement substances between the muscular fibre cells being softened. The author does not admit that this change is universal, for in many cases it cannot be found, while it is not unfrequently well marked in cases in which death has occurred slowly; it is also of very frequent occurrence in typhus fever, while in this disease sudden death is not at all common; the same applies to small-pox. In diphtheria, also, sudden death is rare, while cardiac degeneration is very common.

Landouzy and Siredey have advanced the theory that ischæmia of the cardiac walls, due to swelling of the cells of the endothelium of the vessels supplying the heart, is the cause of sudden death in typhoid; but this change is of limited extent, and cannot be accepted as a probable explanation.

—The St. Louis Medical Society is endeavoring to secure sufficient funds to erect a building for their meetings and library.

Distribution and Etiology of Abscess of the Liver.

Dr. D. H. Cullimore, basing his statements upon statistics taken from the Report of the European Army in India from 1870 to 1879, declares (*Med. Pres. and Circular*) that, in his opinion, the predisposing factors (the greatest of which is prolonged heat) being equal, if we possessed an accurate knowledge of the stations in India, or elsewhere in hot countries, where hepatic abscess is most rife, we should find that they are such as favor most powerfully the operation of chill. Secondary factors are such exercises as are conducive to injury of the liver, already in a state of irritative congestion,—a condition in which rest is essential to resolution and cure. He asserts that the conditions most favorable to chill are:

First. Great monthly, and great daily, and sudden variations of temperature, particularly if associated with a heavy rainfall, following great heat.

Second. Situations on large rivers, particularly in hot river valleys, the river being subject to annual floodings, soliciting exposure to wettings.

Third. Misty and foggy situations on the slopes of mountains with a great rainfall.

Fourth. Situations overtopped by hills, or in the vicinity of hilly or mountain gorges, bare rocks, or isolated hill tops, such being easy of access.

Fifth. Excessive rice cultivation.

A combination of several of these factors is especially dangerous. In the absence of such conditions, it will generally be found that a high mortality from abscess is associated with the presence of cavalry or artillery.

Thirty-five Operations for the Radical Cure of Hernia by Original Methods.

Arthur E. Barker, F.R.C.S., surgeon to University College Hospital, gives (*Brit. Med. Journal*, Dec. 3, 1887) the following statistics of these thirty-five cases, although he admits that it is too soon to speak of the ultimate results as regards permanency of cure:

Of the 29 individuals operated on, 7 have been lost sight of, 20 have presented themselves recently for examination, and 1 has been heard of through competent observers. Of the 3 other cases in which the rupture returned and a second operation was necessary, the result was palpably due in 2 cases to the rapid absorption of the carbolized gut in one,

and of kangaroo tendon in the other; and in the third, which was one of his earlier operations, he was conscious at the time of not having taken up enough of the walls of the canal in his stitches.

None of the remaining 20 cases which have been followed up to date, and in all of which silk has been used, show any sign of return of hernia so far. Three were seen quite well twenty months after operation, 7 between twelve and fifteen months also quite well, and 4 between six and twelve months. It may be interesting to note that in one case whooping-cough, nine months after operation, had failed to reproduce the rupture, but had been bad enough to bring down a hernia on the opposite side, which had been perfectly sound before.

The objects kept specially in view in dealing with the cases of inguinal hernia above mentioned have been:

1. To free the inguinal canal and both rings from the presence of the sac, so that accurate closure might be effected.
2. To strip the neck of the sac from the cord with as little disturbance of the vascular and nervous structures of the latter as possible.
3. To cut the sac across just outside the external ring, and reduce its tied stump well within the internal ring, fixing it there by the same ligatures which close its neck.
4. To close the internal and external rings and all the length of the canal firmly with strong silk sutures.
5. To leave the fundus of the sac undisturbed in the scrotum, so as to avoid damage to the cord, testicle, and their vascular and nervous supply.
6. To get union by first intention everywhere, so that the deep sutures shall remain unchanged, and help to permanently close and control the rings and inguinal canal.
7. To avoid the use of trusses except in cases of umbilical hernia.

The author states in a note, dated November, 1887, that since his paper was read before the British Medical Association, in August, 1887, he has added six other operations to the above thirty-five. Of these, one was femoral and four were inguinal. Of the latter, two were congenital. All healed by first intention, except one, in which there was free suppuration in the scrotum; but the patient, a boy, is now at home well; one is still in hospital, but is quite well. There has been a return of the hernia in two cases in addition to those mentioned above, one in a very fat woman (umbilical), the other in a young man who had been at very hard work without a truss ever since soon after operation.

Laceration of the Radial Nerve in Complicated Luxation of the Elbow; Successful Secondary Suture.

In the *Deutsche Zeitschr. f. Chirurgie*, xxv, 3, Dr. G. Ledderhose reports a case in which he operated on a patient thirty-two years old, who, four months before had sustained a complicated luxation of the right elbow-joint, with laceration of the radial nerve. The injury was followed by high fever and suppuration of the joint, and necrosis of the external condyle of the humerus. Recovery ensued, but with ankylosis of the forearm at a right angle, and complete paralysis of the radial nerve. The muscles supplied by the radial nerve were completely paralyzed, and exhibited marked reactions of degeneration. On laying bare the ends of the nerves which had been torn apart, the proximal extremity was found expanded and united with the capsule of the joint, while the distal extremity was likewise thickened and firmly adherent to the tissues surrounding it, so that the ends of the nerves were separated from each other by a space of from two and a quarter to three and a quarter inches. The ends of the nerves were freshened diagonally, and sewed together, the position of the arm being at an acute angle. The wound healed rapidly by first intention. After the first few days of the operation, the functions of the interossei returned, which before had probably only been injured through cedema of the hand. Eight months later, active extension first became possible. By careful after-treatment, consisting of massage and electricity, the functions of the muscles supplied by the radial nerve had nearly completely returned, but the arm was still ankylosed at an obtuse angle, and there was disturbance of sensibility over an area in the forearm the size of the palm of the hand.—*Deutsche Medizinische Zeitung*, Nov. 28, 1887.

Caseine as a Basis for Emulsions.

In the *Bul. de la Société de Thérapeutique*, Nov. 13, 1887, Léger strongly recommends the use of caseine in preparing emulsions, claiming that when prepared in this way they may be called "milk in which the butter has been substituted by a medicinal substance." The formula which he recommends is:

- R. Ol. ricini (or any other oil) 20 parts.
Caseini saccharati..... q.s.
Aque destillatæ..... 100-200 parts.
Aque menth. pip..... 5 parts.

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THE
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CHARLES W. DULLES, M. D., EDITOR.

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MEDICAL TESTIMONY IN SUITS FOR DAMAGES.

Some of the peculiar aspects of medical testimony in suits for damages are illustrated, and some practical reflections are suggested, by a case which is now on trial in New York.

On January 6, 1888, a woman forty-one years old, and with the appearance of an invalid, came before the Supreme Court of New York, claiming \$20,000 damages for the results of an injury caused by a fall in the street, on January 13, 1884. The accident seems to have been caused by her stepping inadvertently into a hole about four inches deep in the street crossing. In support of her claim, Dr. Jas. W. Ranney testified that she had concussion of the spinal column; that before the accident she was an unusually strong, hardy woman; and that now it was only a question of time when she would die from the effects of her injuries.

The principal witness examined for the defence was Dr. N. M. Shaffer, who said he had examined the plaintiff, and could say positively that she had no disease or injury of the spine.

There were no soft spots in the marrow, as Dr. Ranney testified. The spinal column was in its normal condition. Her only trouble was hysteria. Falling forward as she did, it was impossible for concussion of the spine to result. If the woman would collect her will power she could get up and walk as well as anybody.

From our appreciation of the skill and integrity of Dr. Shaffer, and from certain sidelights thrown upon this case by points in its history which have no medical interest, as well as from our acquaintance with a number of suits for damages to which this one does not appear unlike, we are inclined to the belief that the city of New York does right to interpose every legal obstacle to the claim for damages made by this woman. It is true that a physician testifies that she has been seriously injured, and that positive testimony usually carries more weight than negative. But it by no means follows because one or a number of medical men testify that an injury, inappreciable to the senses of the laity, is present in a given case, that it is so. Unfortunately, there are some medical men who, in the hope of gain, will become surprisingly acute in discerning such injuries; and there are more, who are so moved by sympathy, and so credulous of the assertions of their patients—and especially of their women patients—that it is not hard to get them to corroborate what the latter say, and to supply them with terms which prove impressive to a jury, for symptoms or conditions which are common and innocent enough.

Such things are happening every day; and it behooves those who have the opportunity to express the sentiment of the medical profession, to protest against a wicked, or an amiable, prostitution of its reputation to the uses of designing persons. As a class, medical men have the deepest sympathy for suffering, and are always ready to assist in securing redress for an injury. But they have no interest in robbing corporations on account of injuries which have never taken place; and they cannot be too careful to avoid becoming abettors of any scheme which may do an injustice if it succeeds, or bring shame upon them if it fails.

TETANUS FROM USE OF THE STOMACH-TUBE.

The *New Yorker Med. Presse*, December, 1887, brings to us, through several intermediate channels, the report of an interesting case of death following speedily the use of an œsophageal or stomach-tube. The patient was a man forty-eight years old, who had been treated seven years before for stricture of the pylorus. At the time when he came again under treatment, he was suffering with flatulence, pain, progressive weakness, and frothy vomit. His stomach was found to be dilated. It was decided to wash out his stomach, and a tube was passed down his œsophagus. Hardly was this down, when he became faint, and the instrument had to be removed. Two hours afterward his jaws became stiff, he could not open his mouth, his arms became rigid, pronated and flexed, and his thumbs were flexed in his palms. He retained his consciousness; but was in a profuse sweat. Gradually all the muscles of his limbs and trunk became rigid; his temperature rose to 113° , and he died cyanosed.

At the autopsy, the diagnosis of stricture of the pylorus and dilatation of the stomach was confirmed, and no lesion of the mucous membrane of the œsophagus could be found.

The presumption is that this was a case of tetanus, caused by the mere impression of the operation. It is analogous to a few other recorded cases in which tetanus occurred, for which there seems to be no explanation, except that it was largely due to a mental impression. A number of these cases are precisely like certain cases of so-called hydrophobia, in which no material injury, no infection can be supposed to have given rise to the symptoms, and in which the phenomena are only explicable by the assumption that they were due to a pure psychosis.

This assumption does not make the *rationale* of such occurrences clear; but it may prevent false notions in regard to their etiology. It may, therefore, be useful to call attention to this new illustration of the possible effect of a trifling operation which makes a great impression on the mind of the patient, in order to point out what may be at the same time a

source of great danger and an occasion of false theories in regard to morbid manifestations. In the case mentioned above, perhaps no foresight could have prevented the catastrophe, and certainly none of the recently announced theories of the etiology of tetanus can explain it.

SUB-PUBIC LITHOTOMY.

At a meeting of Berlin surgeons, Nov. 7, 1887, LANGENBUCH delivered a lecture on what he called "*Sectio alta Sub-pubica*." Impressed with the dangers and inconveniences of perineal lithotomy, Langenbuch has for some years practiced, and advocated the merits of, suprapubic lithotomy. But even this has its dangers, namely, the formation of prevesical phlegmon, if the sutures placed in the bladder do not hold; and the inconvenience of obstruction of the catheter sometimes placed in the urethra for the purpose of drainage. Langenbuch therefore proposes opening the bladder, to remove a stone, by means of an incision between the root of the penis and the pubic bone. This incision should be cross-shaped, and should be made so as to not to implicate the corpus cavernosum or the vena dorsalis of the penis. On reaching the bladder, the vesiculus plexus at its neck should be pushed aside. To give room, he suggests that the lower portion of the pubic bone may be chiselled away. After this—or without it—the bladder is to be incised; and then it can be thoroughly explored, and any foreign body in it can be removed. If this be found impracticable, Langenbuch advises proceeding at once to open the bladder above the pubes in the usual manner of suprapubic lithotomy. For drainage he proposes making a counter incision through the perineum, in which a drainage tube is to be placed, while another occupies the sub-pubic wound. In this way, the urethra is not used at all for drainage.

This proposition of Langenbuch he has never put into practice, and it is founded upon purely theoretical opinions. It includes two principal points: the first, approaching the bladder immediately below the arch of the pubes; the second, making a counter

opening through the perineum for drainage. Neither of these is likely to meet with general acceptance. As long ago as 1750, Pallucci proposed making a counter opening in the perineum for drainage after suprapubic lithotomy; and for about fifty years after 1758, Frère Côme practiced it with results which satisfied him, and which were excellent for that time.

The sub-pubic route to the bladder may have some merit; although it is not easy to say wherein it adds to the chances of success which are offered by a properly chosen operation for stone by way of the perineum or by way of the hypogastrium.

ALBUMINOUS PERIOSTITIS.

Not long since, Prof. Ollier, of Lyons, whose special studies in diseases of the bones and joints have been so extended and so thorough as to entitle his opinions to the greatest weight, described as a special form of periostitis that in which the affection is not accompanied by the formation of pus, but simply of a watery, albuminous, sometimes of a yellowish fluid, in which fat globules are present. This form of periostitis is sufficiently common; and certain German surgeons soon published observations and opinions corroborative of those of Ollier in regard to its features and its peculiar character.

But it is questionable if it be an advantage to attempt to set apart as a peculiar form of disease—except for conciseness of description—one which has a common origin and a common history with other varieties of a well-recognized class. It is not surprising, therefore, to find so accomplished a surgeon as PROF. ROSER, of Marburg, protesting (*Centralblatt für Chirurgie*, Dec. 10, 1887), against the distinction made by Ollier, and endorsed by Riedinger, and Schlange in Germany, in regard to so-called "periostitis albuminosa." In the brief paper referred to, Roser shows that this form of periostitis has been fully recognized and well described before Ollier discussed it, and that it is so far from being a special disease that he himself has found it in the left tibia of a patient

who had an ordinary osteo-myelitic abscess in his right tibia.

We share the opinions of Roser in this matter, and think it a mistake to attempt to make a special class of cases of periostitis in which there is no pus formation—except, as stated above, for mere convenience of description. For it may be desirable to have a short term, by which to express the difference between periostitis with pus-formation and that with the accumulation of a watery, albuminous, and sometimes fatty fluid beneath the periosteum. If this be all that is implied by the expression "periostitis albuminosa," we cannot see any harm in it.

VARICOSE VEINS IN THE TONGUE.

At the meeting of the Berlin Medical Society, November 23, 1887, DR. LAZARUS presented a patient who had a dilatation of the veins of the dorsum of the tongue. The patient had applied for treatment on account of expectoration of blood. There were no indications of lung disease in his physical condition, or from his family history. In examining his pharynx, Dr. Lazarus discovered at the base of the tongue, on the left side, far back, a bluish swelling, about half an inch wide, and extending to and upon the epiglottis. The patient said he had had, years before, a varicocele; but at the present time he had no evidence of it, or of any other varicose veins than those in the tongue. Treatment addressed to the pharyngitis granulosa, which the patient had, was successful; but the varicose veins remained unaffected by it.

The interest in this case is connected with the danger of hemorrhage from sudden rupture of the varicosity; the difficulty which might be experienced in checking it; and the possibility of an error as to its source.

NUTRIENT ENEMATA.

PROF. EWALD, of Berlin, has recently made some careful experiments with different nutrient enemata (*Deutsche Med. Woch.*, Dec. 1, 1887), and has found that enemata of eggs were of decided service; and that they were as efficient and satisfactory without being peptonized as when they were subjected to this process.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained, upon receipt of price, from the office of the REPORTER.]

DOCTOR AND PATIENT. By S. WEIR MITCHELL, M.D., LL.D., Harv., Member of the United States National Academy of Medicine, etc. 8vo, pp. 177. Philadelphia: J. B. Lippincott Company, 1888. Price, \$1.50.

It would be impossible to do justice to this unusually interesting and very instructive book in the space we can spare for our reviews. Those who are familiar with the author's style need not be told that he has a peculiar faculty for putting facts which many people observe in a way which few people could emulate. He seems to take each reader into a sort of confidential and familiar relation, and to talk to him as a personal acquaintance. In this way he has succeeded, in the book before us, in putting what he was tempted, he says, to call "Lay Sermons" in a shape which is at the farthest possible removed from sermonizing. As we glance over its pages we find it hard to refrain from quoting some of his wise and kindly instructions or suggestions. But we will not anticipate the pleasure of our readers when they have the book in their own hands.

REPORT OF THE SURGEON GENERAL OF THE ARMY, for the fiscal year ending June 30, 1887. 8vo, pp. 107. Paper. Washington: Government Printing Office, 1887.

Most of this report is made up of matters of special interest to medical officers in the army. But there are a number of matters of interest, from the standpoint of hygiene and the diseases of certain localities, to medical men in general practice. We note, also, the fact that the number of medical officers in the army who are permanently disabled is becoming a cause of embarrassment to the efficiency of the medical department, and that the Surgeon General, Dr. Moore, urgently recommends that an increase of twenty assistant surgeons be authorized.

HEALTH LESSONS. By JEROME WALKER, M.D., Lecturer on Hygiene at the Long Island College Hospital, etc. Small 8vo, pp. 194. New York: D. Appleton & Company, 1887.

Dr. Walker has essayed a difficult task—to write a book that shall embody scientific truth in regard to matters of life and health in such a way as to interest and instruct children. He has succeeded quite well. The teachings of his book are sound and his style is interesting, most of the illustrations are very good, some of them are beautiful. A few are of questionable taste; on the whole we think this the best book of the kind which has been subjected to our criticism.

FEVER NURSING, DESIGNED FOR THE USE OF PROFESSIONAL AND OTHER NURSES, ETC. By J. C. WILSON, A.M., M.D., Visiting Physician to the Philadelphia Hospital, etc. 8vo, pp. viii, 210. Philadelphia: J. B. Lippincott Company, 1888. Price, \$1.00.

This is an admirable book by one perfectly competent, from his experience in practice and in teaching, to prepare it. It is the substance of lectures delivered to the class of nurses in training at the Philadelphia Hospital, and embodies clear and useful instructions for the management of fever patients. These instructions are, however, applicable to almost any form of disease, excepting surgical cases. Recent

experience prompts the suggestion that it would not be amiss to add to them some upon certain homely subjects, such as the ministrations of the nurse in giving food and in assisting in the acts of urination and defecation. These ministrations, if properly carried out, may be a great alleviation of the miseries of a severe illness; while, if carelessly or ignorantly performed, they may materially increase these miseries.

This by way of suggestion. As it stands the book before us can be recommended in the strongest terms to nurses and to physicians. It is well written and very handsomely printed; and its moderate price brings it within the means of all who need it.

A LABORATORY MANUAL OF CHEMISTRY, MEDICAL AND PHARMACEUTICAL, ETC. By OSCAR OLDBERG, Pharm. D., Professor of Pharmacy in the Illinois College of Pharmacy, and JOHN H. LONG, Sc.D., Professor of Chemistry in the Chicago Medical College. 8vo, pp. 435. Illustrated (with five plates).

The object of this work is to provide lessons for laboratory work in chemistry with especial reference to the preparations used in medicine in the United States. The execution of this plan is well carried out, the processes being simply and clearly described and confined to those having the most important bearing upon pharmacy and the practice of medicine. In the part of the book devoted to analytic chemistry we note that Moore's test for sugar in urine is not given. This, although by no means an exact test, is, within certain limits, a useful and satisfactory one. Here also we find albumen (in urine), where we think albumin a preferable term.

Throughout the book the quantities are given in parts, or in measures of the metric system. This is an almost universal custom in works on chemistry. We think it would be no disadvantage if the corresponding quantities in Troy measure had been placed with those of the metric system.

As a whole we believe this book to be worthy of strong recommendation; and we heartily congratulate the authors and the publishers upon its contents and appearance.

PAMPHLET NOTICES.

CLINICAL REPORT OF SURGICAL CASES OPERATED UPON BY PROF. A. C. BERNAYS. Reported by DR. W. V. KINGSBURY. From the *International Synopsis of Medicine and Surgery*. 8 pp.

COMPARISON BETWEEN THE SURGICAL DISEASES OF THE WHITE AND COLORED RACES. By LOUIS McLANE TIFFANY, M.D. From the *Transactions of the American Surgical Association*, 1887. 4 pp.

AN EXPERIMENTAL STUDY OF THE EFFECTS OF PUNCTURE OF THE HEART IN CASES OF CHLOROFORM NARCOSIS. By B. A. WATSON, A.M., M.D. From the *Transactions of the American Surgical Association*, 1887. 37 pp.

RUBELLA (RÖTHELN; GERMAN MEASLES) with a Report of 150 cases. By J. P. CROZER GRIFFITH, M.D. From the *Medical Record*, July 2 and 9, 1887. 36 pp.

—Dr. Kingsbury's Report contains brief accounts of the more important operations of Prof. Bernays at the Surgical Clinic of the St. Louis College of Physicians and Surgeons, from September 22 to October 22, 1887. These include a resection of a rib,

extirpation of the tongue, laparotomy, Porro's operation (mother died in few days; child living), gastrostomy, nephrectomy (patient died in 18 hours).

—Dr. Tiffany has studied the comparative effects and results of surgical affections in the white and colored races during a period of thirty-four months, and in 4930 patients. Abscesses, spinal caries, keloid, inflammatory phimosis are relatively more common among negroes than among whites; congenital defects are more rare among negroes than among whites; suppurative troubles and diseases affecting the lymphatic system are more common among negroes than among whites; negroes bear surgical injuries and operations better than whites.

These interesting conclusions of Dr. Tiffany suggest, as he says, further study. His pamphlet is illustrated with a fine phototype of a remarkable case of keloid in a negro.

—Dr. Watson presents a very thorough and valuable study of the effect of puncture of the heart upon animals subjected to chloroform narcosis. He describes in detail the results of sixty experiments; forty of which were made on animals suffering from complicated traumatic injuries, and forty on animals healthy and uninjured. He concludes that puncture of the heart, especially of the right ventricle stimulates its muscular contractions; and that this is of advantage in dangerous chloroform narcosis; especially if a certain amount of blood is also abstracted with the puncture.

The views of Dr. Watson met with some criticism from his fellows in the Surgical Association; but they deserve careful consideration and perhaps a more favorable acceptance than they received when first announced. As a contribution to our knowledge of the phenomena of the hearts movements under mechanical stimulation they are of great value.

—Dr. Griffith's pamphlet contains the most complete summary of the history of rubella (or German measles) of which we have knowledge. It also contains a very clear synopsis of its symptoms and course; and—less than six lines in regard to its treatment. This is summed up in the injunction to give a light diet; to keep the patient in bed for a few days, if there is fever, and in the house for a week. Chilling of the body is to be avoided, and severe symptoms or complications are to be treated as they develop. Dr. Griffith says, that rubella is usually a disease of no danger whatever. This is no doubt true; but one of the saddest cases of which we have ever known was that of a child of a physician in Philadelphia, which had what was diagnosed as German measles, followed by indubitable evidences of pus formation in various parts of the body, including the brain, with extreme and persistent contractures and long continued imbecility. Such a fact as this should be borne in mind in judging of the possible effects of what may seem like a trifling malady.

—The care of croup.—Dr. H. R. Wharton lectured, Dec. 22, 1887, before the Nurses' Training School, in the amphitheatre of the University Hospital, on the duties of nurses in the care of cases of croup, before and after the operation of tracheotomy. He showed his audience the different appliances used in the treatment of that disease, and the method of cleansing the tube which is inserted in the windpipe after the operation.

CORRESPONDENCE.

Twisted Terms.

ED. MED. AND SURG. REPORTER:

Sir:—Your "humor" column in the REPORTER induces me to tell you what a good woman said to me three years ago. I am sure it will be appreciated by the doctors. She said, "I am so sorry for Mrs. —, she has been a confirmed infidel for five years, not able to sit up at all. She had a sore, and the cantereen set in, and the doctors held a meeting over her, and thought her limb would have to be amputated." And in a certain town in Orleans County, New York, an ignorant man given to struggling with big words, said to me, "No, I haven't been what you might call *well* in some considerable time. I consulted Dr. —, and he told me my trouble was a stoppage in the seekerative ducat of the liver." I told him that, although I am a minister and not a doctor, I believed that particular ailment of the liver to be generally fatal unless attended to in its incipient stages!

Yours truly, J. W. SANBORN.

Lockport, N. Y.

Chewing and Swallowing Glass.

ED. MED. AND SURG. REPORTER:

Sir:—At the risk of being considered over-credulous or easily deceived, I write you in regard to a novel case that recently came under my notice.

A negro man, named Bill Jones, 39 years old, recently visited this State. He says he has been eating glass since he was two years old. He has never been sick enough to require the attention of a physician. I saw him eat part of a lamp chimney while on exhibition, and took him to my office and saw him perform the same feat two or three times. Most people will not believe he eats the glass, but I know it is no trick of leger-demain.

If I am not mistaken, it has been the opinion of the profession, as well as of the laity, that powdered glass was sure to cause death if swallowed in any large quantity. This negro says he has eaten as many as five large lamp chimneys without stopping. He chews the glass about as fine as one would ice. He says he discharges it from his bowels in the same state as when swallowed. He never suffers from any pain in his stomach or bowels. Have you, or any of your readers, ever seen or heard of such a case?

Please don't say that it is simply a sleight-of-hand performance. *I know he eats the glass.*

Yours, truly, B. B. GRACY, M.D.

Smyrna, Tenn., Dec. 26, 1887.

[There can be no doubt that certain public performers have chewed and swallowed glass with apparent impunity, and we have no doubt that Dr. Gracy's observation is correct. If glass be chewed small enough, it would probably be a fairly safe, though not a very nutritious, article of food. Most people would find it impossible to chew the glass without cutting their mouths. But, if they succeeded in this step, there is no reason why it should not pass through the bowels.

—EDITOR OF THE REPORTER.]

Experience with Antifebrin.

ED. MED. AND SURG. REPORTER :

Sir:—Not seeing much written, and seeing some inquiry about antifebrin, I have concluded to give the readers of the REPORTER my experience.

Case 1.—Wm. D., age 18, an epileptic, was just getting over an attack which left him with a terrible headache. I gave him four fifteen-grain capsules, one to be taken every three or four hours until he was easy. He took one at noon, and one at 4 P. M. His head was easy at 6 P. M., and he slept well. The next morning he had a slight headache, and took one capsule. He reported himself as cured that evening.

Case 2.—Mr. V. D., age 57; first stage of typhoid fever, with temp. 104°, pulse 80, and severe frontal headache. It was my first visit, and he lived near Wm. D. I had not been in the house long when he asked me if I had any of those capsules for headache that I gave to Wm. D. I said I had, and gave him a ten-grain capsule, which eased his head, made him sweat terribly, reduced his fever two degrees, and brought his pulse down to 56. I thought it was the antifebrin which reduced his pulse, but I found it was not, by leaving it off. I continued to give him ten-grain capsules every afternoon; gave one every three hours, and only one day did he have to take the third dose. He made a good recovery.

Case 3.—Mary B., age 19, has tabes mesenterica, with headache, dry skin, quick pulse, etc. I give her eight to ten grains of antifebrin nearly every afternoon, and never have to give the third dose.

I find in antifebrin a medicine which will relieve nearly every kind of headache, and reduce the temperature when there is fever. In the majority of the persons to whom I

have given it, it has produced sleep more natural than that caused by opium or chloral.

Yours truly, S. R. HUMSTON, M.D.

Smithville, Ind., Dec. 30, 1887.

A Warm Friend.

ED. MED. AND SURG. REPORTER :

Sir:—For the past seventeen years the REPORTER has never failed to visit my office once a week, and we are not only old friends, but also fast friends. For these years it has been my constant companion. It has visited with me many hundred tedious and wearisome cases, and in the long hours of the sick room, it has been my instructor and assistant. In many difficult, dangerous and obscure cases, it has been to me a very present help in time of need, conveying to me the knowledge of cases of the same character that some other brother in the profession had had, and how he managed them. Though wearied with the press of business, and worried with its anxieties, I have always found time to read its plain, condensed, practical and often brilliant articles. I have been in the active practice of medicine for more than a quarter of a century, and have been all of that time a constant student; yet I feel the need of a good live journal as much to-day as I ever did. And I would urge my younger brethren in the profession to secure some good journal—preferably a weekly, and *my preference is the REPORTER*—and never let its subscription lapse while in practice. No physician can do justice to his patients or to himself without such aid.

Having been a reader of the REPORTER under its three managements, it may not be presumptuous in me to state my idea of its value. The REPORTER has always been good—worth many times its subscription price. To be frank I think you have in many ways improved its usefulness—that its society, clinical and case reports are better, more practical in character and contain more of the resources of the profession. I also admire the spirit of conciliation manifested—the live and let live theory. Life is too short for bickerings; science is cosmopolitan; all of our resources should be freely divided with our brethren and the world.

Keep on the safe ground of well-attested experience in practice; give us all of the latest and best, and success for the journal in the future as in the past will be assured.

Yours truly, J. B. HATTON, M.D.,

Secretary U. S. Board of Examining Surgeons,
Red Oak, Iowa, Dec. 26, 1887.

NOTES AND COMMENTS.

The Use of Ligatures on the Limbs During Surgical Operations.

In the *N. Y. Medical Journal*, December 17, 1887, Dr. L. M. Sweetnam, of Toronto, recommends the employment of ligatures in surgical operations in order to secure more rapid anæsthesia, with the employment of a smaller quantity of the anæsthetic. This procedure has been employed by other surgeons, and Dr. Sweetnam does not claim originality for it. The advantages of this method are stated to be:

1. But little time is lost in securing complete anæsthesia, and but little in waiting for returning consciousness before leaving the patient after the completion of the operation.
2. If the bands are applied ten or twelve minutes before the first incision is made, the operation will be a comparatively bloodless one, and the surgeon works more rapidly and more comfortably than he would if the hemorrhage were more severe.
3. Saving of blood to the patient.
4. If collapse appears to threaten the life of the patient, the removal of one or more of the ligatures can be relied upon to bring about a prompt reaction.
5. There is less vomiting and distress after the use of the anæsthetic.
6. The small amount of ether or chloroform used, from an economical point of view.
7. Fewer ligatures and compression forceps are required to control the bleeding.
8. Less embarrassment of lungs and kidneys, and lessened risk of serious injury to these organs if diseased.

Care is to be observed in employing this method where there is a history of purpura. The author also states that while the constriction may be kept up for two hours with perfect safety, it is well to keep the limbs wrapped in blankets, so as to prevent serious loss of heat.

Erysipelas in an Infant Three Weeks Old; Recovery.

T. B. Greenley, M.D., in a communication to the *South-Western Medical Gazette*, says that on October 10, 1887, he was called to see an infant three weeks old suffering from erysipelas. The disease first manifested itself the day before, and affected the labia. The parts were very much tumefied and indurated, which led him to regard it as a case of forming abscess. At this time the disease had not extended from its original site. The temperature was 102°.

On October 12, the inflammation was extending towards the right hip, and erysipelas was then diagnosed; the temperature was then 102.5°. The tumefaction of the labia increased. Solution of acetate of lead was used locally; the other treatment consisting of chalk and bismuth was continued.

By October 15, the inflammation had extended upwards as high as the navel on the right side, and as low down as the knees on both sides. The temperature, however, had fallen to 101.5°. The lead solution was changed for hyposulphite of soda, for fear of lead poisoning from absorption. The labia were still greatly tumefied and hard, but with no sign of pus. The treatment with milk punch, which was begun two days before, was continued, with the addition of a small quantity of morphia, to procure quietude.

The next day the disease ceased to extend upward, but still continued to extend downwards.

By the 19th, the disease had reached the feet, which were greatly tumefied. The labia were not quite so much swollen and slightly less hard. The child rested and nursed well; the temperature was 100°. The same treatment was continued.

On October 23, the inflammation had disappeared from the feet, and the patient was convalescent.

Treatment of Middle Ear Complications of Scarlet Fever.

Dr. Samuel Theobald stated before the Clinical Society of Maryland, at its meeting on December 4, 1887, that in his experience he had obtained very little effect from the use of the tincture of iodine, or the cleate of mercury locally; but had found that atropia sulphate, grains four to f3j, would give great relief. He usually drops five or six drops in the ear and keeps the child quiet for several minutes. He thinks he has seen cases of such inflammation cut short by this method of treatment. In addition to atropia he now intends to use cocaine. He does not think that external applications accomplish much. Atropia gives almost instant relief from pain, and if used early enough will often prevent destruction of the drum membrane.

At the same meeting Dr. Hiram Woods remarked, that cases of purulent otitis from scarlet fever are attended with more complete deafness than otitis from other causes, and that they are very hard to cure. The cavity of the middle ear is usually filled with granulations. Atropia gives almost instant relief if the drum is not ruptured;

but when purulent otitis exists and the drum is still intact, the best treatment is to puncture it and let the inflammatory material out.

Dr. I. E. Atkinson said, that the frequency with which the hearing may be saved depends upon the time of interference, and, that if the drum is punctured when bulging takes place, many cases of hearing may be restored. Objections to the idea of not performing tracheotomy in these cases, do not have the slightest force. If any lives were shown to have been saved by it, then tracheotomy should be practiced; but one hundred per cent. die. In diphtheria it should be performed because a certain number of lives are saved by it.

Necrosis of Temporal Bone and Rupture of Internal Carotid.

This case is related by Sutphen, in *Archives of Otolaryngology*, vol. xv, No. 4. A man of twenty-five years of age, who had suffered with an abscess in his middle ear from his fourth year, was suddenly seized with pain and right-sided facial paralysis, and then with paralysis of the left half of the body. Shortly after this, pains came on in the right side of the head, followed by giddiness and nausea. The abscess then discharged, and the symptoms for a while abated. Three months later he became worse, hæmorrhage occurred from the ear, and he died. *Post-mortem* examination revealed a sequestrum in the deep parts of the temporal bone, which had eroded the wall of the internal carotid as it entered the skull. The cavity, formed by caries of the temporal bone, was connected through the internal auditory meatus with an abscess of the overlying half of the cerebellum. Above and in front of this was found the remains of an earlier abscess, which was thought by the author to account for the symptoms of paralysis which had been noticed, which had disappeared, following the escape of pus from the fistulous opening under the ear.—*Centralblatt für Chirurgie*, October 22, 1887.

Treatment of Gleet.

The *Quarterly Therapeutic Review*, Oct. 1, 1887, says that Dr. Fred. A. A. Smith, Cheltenham, asserts that some years ago a captain in the army consulted him about a gleet he had had for a long time. Nothing seemed to do him any good; at the same time he was anything but a temperate man, and practically was a very bad subject for treatment. He ordered him an ordinary alum lotion to be used as an injection, and for medicine,

acid nit. dil., η xv; dec. cinchonæ flav., $\mathfrak{f}\mathfrak{z}$, t. d. Returning home from his club in the evening, he took by mistake a dose of the alum lotion, and used the acid mixture as an injection. The consequence was that he suffered great pain for over half an hour, but cured his gleet. Noting this, Dr. Smith tried on his next case, acid nit. dil., η v; dec. cinchonæ flav., $\mathfrak{f}\mathfrak{z}$, as an injection, t. d., and found his patient got rapidly well, and has since used this treatment in several cases with very happy results.

Multiple Ulcers of the Cornea following Exposure to Electric Light.

Mr. T. Phillips, Clinical Assistant to Moorfield's Eye Hospital, reports in the *Lancet*, December 3, 1887, the case of an electrician, twenty-four years old, who, while engaged in making observations of a very powerful electric arc, removed the usual protection from the eyes in order to make a better examination. His eyes were thus exposed to the action of the light for about four minutes. Nothing abnormal was noticed following this exposure until about four hours subsequently, when, on awakening from a sound sleep, he suffered from acute pain in and about the eyes, great intolerance of light, and inability to sleep. The patient's own statement was, "I am stone blind." Five days after the accident, he was still suffering from acute pain and dread of light, which was overcome sufficiently to permit an examination by a ten per cent. solution of cocaine. The anterior surfaces of both corneæ were affected. The right was dotted all over with small definite ulcers. The left had six such ulcers arranged in pairs of three rows disposed vertically. The appearance of these ulcers was similar to that presented by the corneal ulceration which occurs in states of perverted innervation of the eye. The ophthalmoscope revealed nothing abnormal.

The eyes were bathed with boric acid lotion, and a solution of cocaine and atropine applied night and morning. In the meantime both eyes were closed with pads smeared with boric acid ointment. The patient was well in two weeks.

Ointment for Syphilitic Psoriasis.

Mauriac recommends for the syphilitic psoriasis which affects the palms of the hands and soles of the feet, the following ointment:

Oil of cade,	
Mercurial ointment.....	āā 3ij
Vaseline.....	3j

Mix.

NEWS ITEMS.

—Dr. W. Joseph Hearn, of Philadelphia, has removed to No. 1120 Walnut street.

—A dentist in Pittsburg, who pulled a sound tooth by mistake, has been sued by the man from whom it was taken for \$200,000. When it is considered that a whole set of A 1 teeth can be had for less than one hundred dollars, the plaintiff does seem a little exorbitant.

—The New York correspondent of the Philadelphia *Ledger* says that the East river bridge has become to a certain extent a health resort. Physicians prescribe for dyspeptic patients, or for those who suffer with lack of appetite, a walk back and forth, once in twenty-four hours; and at certain hours of the day there is abundant evidence that the prescription is acted upon.

—There are about fifty small-pox patients in the pest house in San Francisco at the present time, and several have died, though the malady has generally been of a mild type. It is claimed the first case was brought there by a China steamer about three months ago. Four Chinamen are said to have died on the voyage, but, as the ship's physician failed to make a report of the fact, the ship was allowed to land her passengers without remaining in quarantine.

—A writer in the *Westminster Review* on "Physic in the Far East" states that in Japanese medical history women were early instructed in the art. They were, with other doctors, admitted to the concurrent practice of charms and incantations, and in 723 female professors were appointed to teach medicine to their sex. At present women are allowed to practice there, and two Japanese ladies who had obtained diplomas in Western medicine should not find any but the medical prejudice in their way.

—What may fairly be called an epidemic of sore throat has been prevalent in Edinburgh for some weeks. The sore throat is peculiar. There is much redness of the palate, fauces and tonsils, with a tendency to the formation of gray patches. The appearance is thus suggestive of the scarlatina throat, and the mode of onset simulates that of scarlet fever. It is, however, unaccompanied by an exanthem, and the febrile symptoms abate rapidly. Suspicion of infection through milk has been aroused, and observations are being carried out on the subject.—*Brit. Med. Journal*, Dec. 24, 1887.

—To one of his physicians, Dr. Timann, the German Emperor recently expressed the wish that he might find it convenient to take

an apartment nearer the palace. On his frank reply that his means did not allow him to live in the most expensive quarter of the city, the Emperor quietly caused an apartment to be hired and furnished at his own expense, within three minutes' walk from the palace, so that he is now able to call him at a moment's bidding, an electric telegraph having been specially arranged to connect the Emperor's study with that of Doctor Timann.—*N. Y. Tribune*, Jan. 2, 1888.

—The London Temperance Hospital has been established fourteen years. In that time alcoholic stimulants have been resorted to in not more than five cases, and in these instances the results have proved no more successful than where the remedies ordinarily used in the hospital were employed. Up to the present time over 30,000 patients have been under treatment, more than 12,000 of whom were to a greater or less degree addicted to drink. Many of those seeing the good effect of this treatment have become total abstainers. In fatal cases there were fully one-fifth more deaths among non-abstainers than among teetotalers.

—There has been an overturning in the Medical Staff of the County Hospital of Chicago, due, it would appear, to political machination. The staff is now constituted as follows:

Dr. Chr. Fenger, Dr. D. A. K. Steele, Dr. A. J. Baxter, Dr. Albert B. Strong, Dr. A. E. Hoadley, Dr. W. T. Belfield, Dr. Truman W. Miller, surgeons; Dr. O. J. Price, Dr. A. J. Coey, Dr. Melins, Dr. A. C. Cotton, Dr. John A. Robinson, Dr. J. P. Ross, Dr. P. J. Rowan and Dr. J. R. Brandt, physicians; Dr. Denslow Lewis, Dr. C. W. Earle, Dr. Charles Henrotin and Dr. John Guerin, gynæcologists. Pathologist, Dr. J. E. Colburn.

—On Friday, December 30, a meeting was held at the College of Physicians and Surgeons in New York city, for the purpose of organizing an American Physiological Association. The association has for its object the promotion of physiological research and of social intercourse among the physiologists of the country. The association will meet as a section of the Medical Congress every three years. The meeting was presided over by Dr. S. Weir Mitchell, and many prominent physiologists from all parts of the country were present. A constitution was adopted, and Prof. H. P. Bowditch, of the Harvard Medical School, was elected president, and Prof. H. N. Martin, of Johns Hopkins University, secretary and treasurer.

HUMOR.

A CORRESPONDENT asks "if it is really true that Job was troubled with boils?" There can be no doubt that he was if he had them.

A STRANGE THING: Jones—Strange thing, Mirandy; every time you draw a breath somebody dies. Mrs. Jones: Well, I ain't going to stop breathing on that account.

DR. BIGBILL—You may thank your stars, sir, that physicians in these days don't bleed patients afflicted with your malady, as they used to. Patient (dubiously)—I'm not so sure that they don't, doctor.

AN ENGLISH JUDGE is said to have laid it down from the bench in 1882 (see *Times* report, October 4 of that year) that "liars may be divided into three classes: Liars, great liars, scientific witnesses."

SMITH—HELLO, JONES! you don't look very well this morning. Jones—And I don't feel as I look. Got up in the middle of the night to take some pills, and swallowed four collar buttons before I found out the mistake.

NO CONFIDENCE IN THAT DOCTOR.—Wife (to third husband)—"If you feel so unwell, John, I think we had better send for my old family physician." Third husband (somewhat hastily)—"No, my dear, I would prefer to send for some one else."

"HELLO, NOBSON, you're not looking well." Nobson—"I am under the weather. Have had to leave off smoking, too." Johnson—"That's bad, that's bad." Nobson—"But that isn't the worst of it. I am dreadfully afraid that leaving off smoking is going to do me good."

OBITUARY.

BALFOUR STEWART, LL.D., F.R.S.

Professor Balfour Stewart was educated at the Universities of St. Andrews and Edinburgh. He had been in turn Director of the Kew Observatory, Secretary of the Meteorological Committee, and Professor of Natural Philosophy in Owen's College. He was fifty-nine years old.

DR. CHARLES T. WIDNEY.

Dr. Charles T. Widney died in Los Angeles, California, on November 6, 1887, at the age of forty-five years. He was born in Kentucky; educated at the University of Louisville; served during the war as surgeon in the southern army; afterward was for a few years in private practice, but spent most of his professional life in charge of private asylums for the cure of the alcohol and the opium habits, in which special field he was eminently successful.

SIR GEORGE BURROWS.

Sir George Burrows, formerly Physician to the St. Bartholomew's Hospital, and Physician in Ordinary to the Queen, died in London recently, at the age of eighty-six.

CHARLES LANGER, M.D.

Dr. Charles Langer, Professor of Anatomy and Director of the Anatomical Institution in the Vienna Faculty of Medicine, died on December 8, 1887, of chronic disease of the lungs.

CHARLES G. POMEROY, M.D.

Charles G. Pomeroy, M.D., died in Newark, Wayne county, N. Y., on the 14th day of December, 1887, in the 71st year of his age. Dr. Pomeroy was one of the most distinguished members of the profession in central New York. He was a permanent member of the American Medical Association, and of the State Society; a member, and one of the founders, of the New York State Medical Association; Ex-President of the Medical Association of Central New York, and of his County Society. As a citizen he stood high, and had the confidence of the community in which he had resided nearly fifty years. D. C.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from Jan. 1, 1888, to Jan. 7, 1888:

Major P. J. A. Cleary, Surgeon, granted leave of absence for one month. S. O. 138, Dept. Ariz., Dec. 25, 1887.

Capt. R. G. Ebert, Assistant Surgeon, ordered from Fort Custer, Mont., to Fort Pemplina, D. T. S. O. 301, A. G. O., Dec. 30, 1887.

Capt. A. H. Appel, Assistant Surgeon, granted leave of absence for twenty days. S. O. 1, Dept. Mo., Jan. 3, 1888.

First Lieutenant C. B. Ewing, Assistant Surgeon, granted one month's leave. S. O. 137, Dept. Mo., Dec. 27, 1887.

First Lieutenant Wm. B. Banister, Assistant Surgeon, ordered from Fort Lowell, Ariz., to Fort Wingate, N. M. S. O. 3, A. G. O., Jan. 5, 1888.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service, for the week ended Jan. 7, 1888:

R. D. Murray, Surgeon, on being relieved at Ship Island, Miss., to proceed to Key West, Florida, and assume charge of the Service. Jan. 4, 1888.

S. C. Devan, Passed Assistant Surgeon, relieved from duty at Port Townsend, W. T., to assume charge of the Sapelo Quarantine. Jan. 5, 1888.

A. H. Glennan, Passed Assistant Surgeon, relieved from duty at Key West, Florida, to assume charge of the Service at Port Townsend, W. T. Jan. 5, 1888.

P. M. Carrington, Assistant Surgeon, promoted and appointed Passed Assistant Surgeon from Jan. 20, 1888. Jan. 7, 1888.